DISABLED

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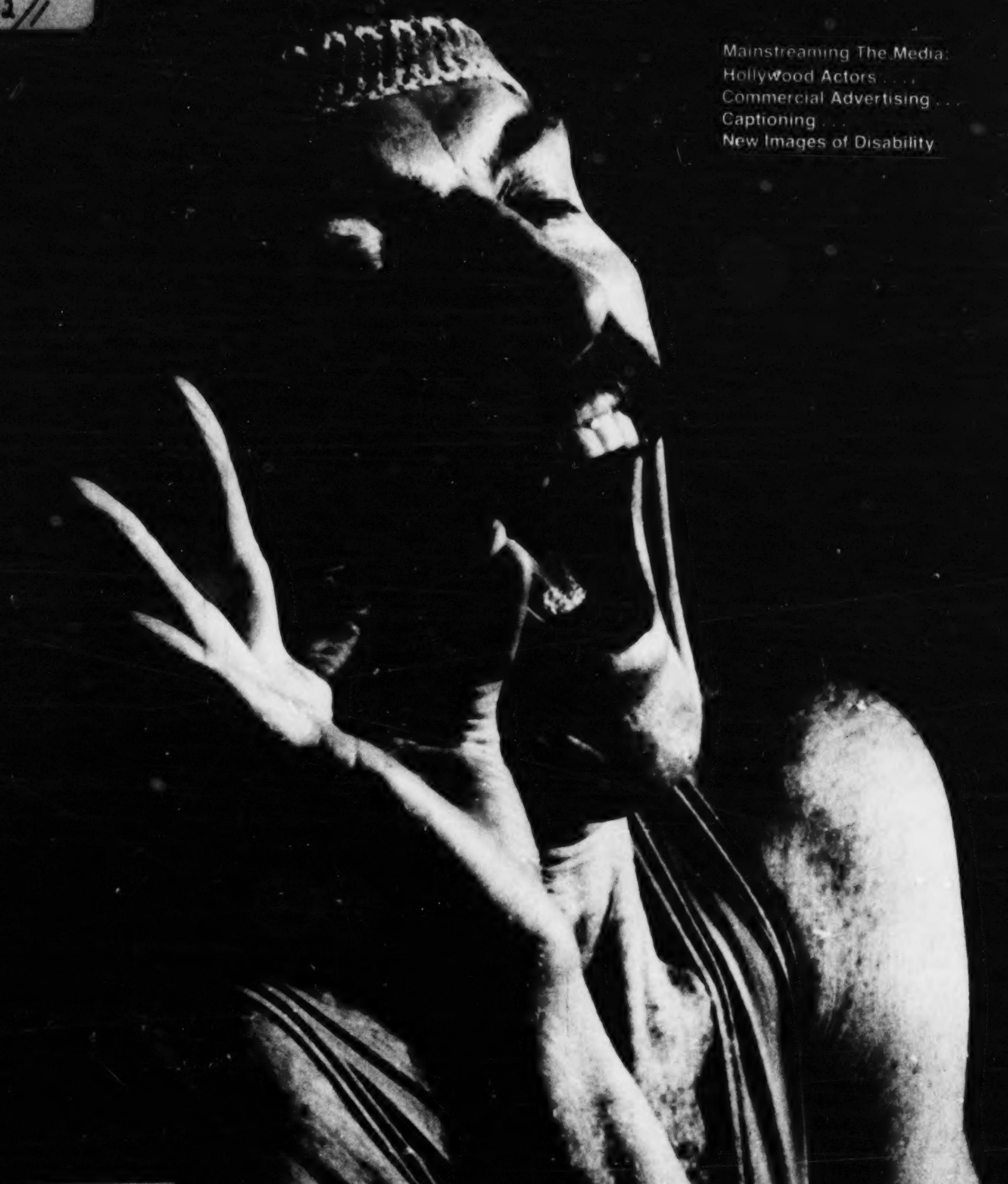
Mainstreaming The Media:
Hollywood Actors . . . .
Commercial Advertising . . .
Captioning . . .
New Images of Disability



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DISABLEDUSA

WINTER 1982

Not every disabled person wants to be an advertising model, a film star, a broadcasting executive, or a drama critic. But at least access to the media, as a career, a hobby, and a pastime, is less forbidden than it was once. Those who harbor an inclination, or a dream, to participate in the media or just to enjoy it more are finding greater acceptance and support.

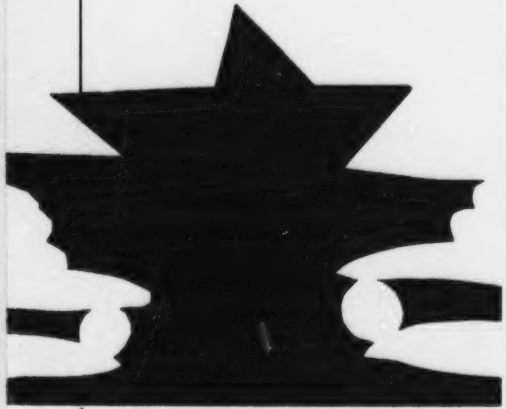
1
OPENING NEW FRONTIERS

5
IMAGE AND IDENTITY

How disabled persons are portrayed in motion pictures, television, charity drives, and public advertising reflects public opinion. It also helps to shape that opinion. Careful use of marketing tactics can encourage social change.

8
CAN DISABLED THINGS GO BETTER WITH COKE?

12



ALAN TOY

15
GIVE THIS MAN A STAR

TV game shows have consistently excluded disabled persons from being contestants. Because one disabled individual wouldn't take this sitting down, a company that produces game shows is giving the handicapped a fair chance to appear and win prizes and cash.

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TUNE IN THE HANDICAPPED

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PHOTOGRAPHS BY FLO FOX

22
AND ACCESS FOR ALL

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CAPTIONING TV PROGRAMS

Technically, captioning is easy. In fact, there is even a choice of different methods of captioning. How existing technologies will be used depends on the preferences of deaf persons, the economics of the broadcast industry, and legal distinctions about the rights of deaf persons.

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CQ CALLING

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CHAIRMAN'S COLUMN

ART CREDITS: Rebecca Kingery, pages 16-18; Zeb Rogerson, pages 30-33.

PHOTO CREDITS: Cover, David Fullard; page 1, Leslie Atik, LE FAVE CO.; pages 5-7, David Fullard, The School of Visual Arts Advertising System; page 8, Nat. Bowling Council; page 9, Ray Leger; page 10, Canadian Paraplegic Assoc; page 19, Vince Grieco; pages 20-21, Flo Fox; pages 26-28, Larry Chase.

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Robert Lovelace, Art Director

DISABLED USA reports progress in opportunities for all handicapped workers, keeps Governors' and Community Committees informed of new ideas and activities, and provides all readers with general information concerning developments in rehabilitation and placement of people with disabilities. In a phrase, Disabled USA presents the case for disabled adults.

The Chairman of the President's Committee on Employment of the Handicapped has determined that the publication of this periodical is necessary in the transaction of the public business required by law of this Agency. Use of funds for printing this periodical has been approved by the Director of the Office of Management and Budget through August 15, 1981.

DISABLED USA encourages the submission of articles for publication by all readers, especially disabled people. Articles should be eight to ten, typewritten, doubled-spaced pages, written in an informal style. We also welcome letters from readers for the RSVP column. (All articles appearing in DISABLED USA may be reprinted with or without credit.)

Opening New Frontiers

Disabled Professionals In Show Business

NEWARK PUBLIC LIBRARY
JAN 6 1983
GOVT. PUBS.
DEPOSITORY 376

"Gerri Jewel To Be A Regular . . ."
"Susie Gilstrap Lands Second Role . . ."
"'Children of a Lesser God' Packed House . . ."

Such headlines are the time-worn format by which developments in the entertainment world are announced to the public. Nevertheless, there is more to these headlines than the standard show biz promotion. They also represent how disabled persons are conquering new employment frontiers in television, motion pictures and theater.

Gerri Jewell, a professional comedienne in her twenties, appears this television season in six to eight episodes of the NBC show "Facts of Life." Jewell has cerebral palsy and plays a character similarly disabled. But the plots of most episodes do not focus on her character's disability: The disability is not the "problem" which the episode resolves. Instead, cerebral palsy is merely one personality trait of the character Jewell portrays.

A year ago, a made for television movie, "Skyward," featured a disabled teenager named Suzie Gilstrap. She played opposite Bette Davis and Howard Hessman in a role which focused on her mobility impairment. The movie was so well received that Gilstrap filmed a sequel, called "Skyward Christmas."

Two years ago in Los Angeles, the play "Children of a Lesser God" opened and featured a mixed cast of hearing impaired and hearing performers. The production now runs on Broadway and is a "Tony" award winner for its theatrical excellence.

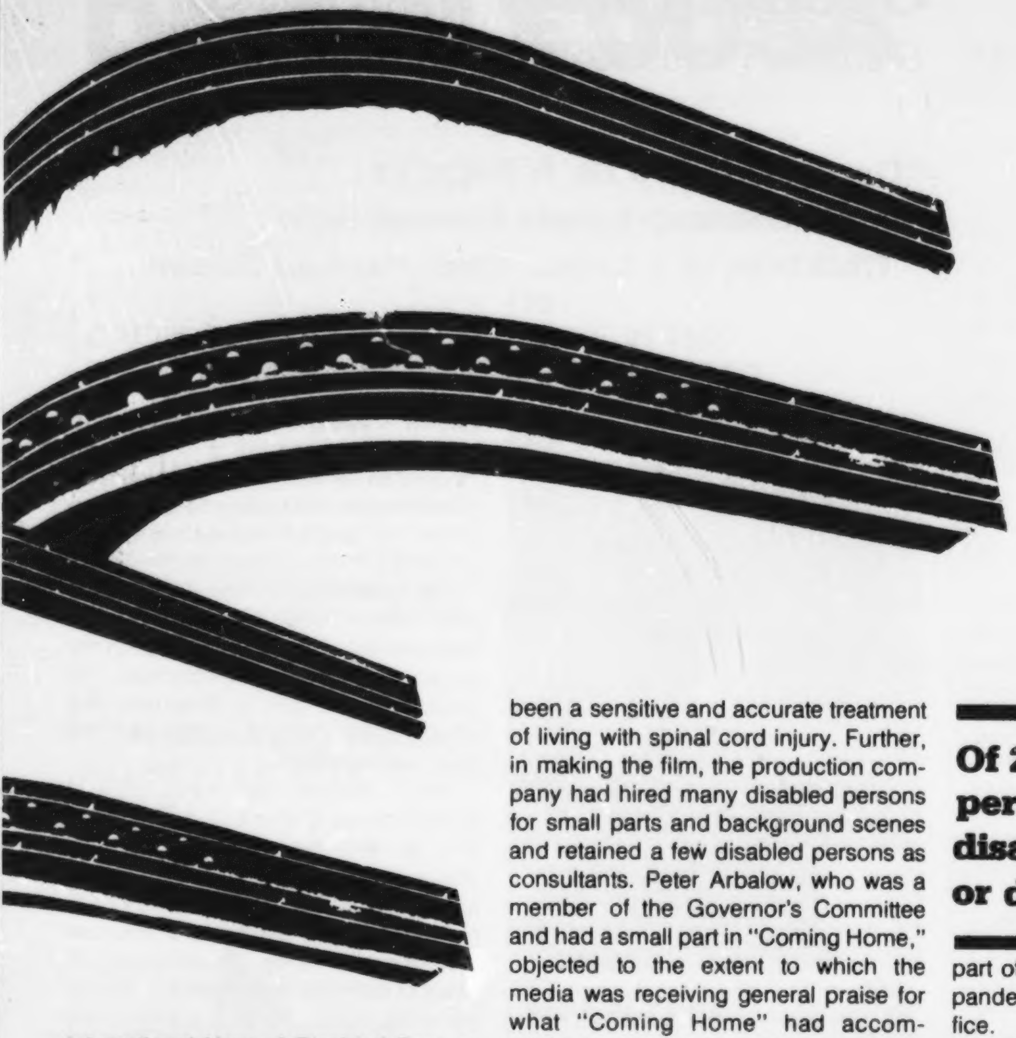
Only a decade ago, these kinds of show business stories and the headlines that go with them did not exist. Of course, at the present time, they are not common occurrences. They are newsworthy and remarkable because they occur so rarely. Nevertheless, interest in disability and disabled persons pervades much of the entertainment media.

Some evidence comes from Los Angeles producer Mona Moore. Last year she surveyed over 200 motion picture and television projects that were under production and found about ten percent of them utilizing disabled performers or disability-related subject matter.

One television network, the National Broadcasting Company, has drafted a public information letter two-pages long that lists network programs in the past year that included disabled performers or focused on disability material. The list is available from NBC, Broadcast Standards, Thirty Rockefeller Plaza, New York, N.Y. 10020.

What has caused this sudden surge of media interest in disability and in the increasing presence of disabled persons before cameras and under stage lights? Nineteen eighty-one being the

READEX MICROPRINT best copy available



International Year of Disabled Persons certainly helped focus attention of the media on disability and full participation in society. However, the foundations for the new media interest in disability began to be laid long before 1981. Promotion for increased use of disabled performers and a more valid treatment of disability in media productions has been occurring for several years by a few people and groups within or close to the media. One of these groups is the California Governor's Committee on Employment of the Handicapped.

Response to "Coming Home"

At a 1979 meeting of the Governor's Committee, the entertainment media's interest in disability was publicly lauded because the movie "Coming Home" had been a sensitive and accurate treatment of living with spinal cord injury. Further, in making the film, the production company had hired many disabled persons for small parts and background scenes and retained a few disabled persons as consultants. Peter Arbalow, who was a member of the Governor's Committee and had a small part in "Coming Home," objected to the extent to which the media was receiving general praise for what "Coming Home" had accomplished. He challenged the media professionals attending the meeting to extend what "Coming Home" had done to other productions and other areas of the entertainment industry.

One professional who responded generously to Arbalow's challenge was Fern Field, a director-producer connected with Norman Lear's Tandem Productions. Under the direction of the Governor's Committee, Arbalow and Field became co-directors of a Media Task Force.

By June of 1980 the Media Task Force had obtained a small amount of funding and some office space. For a director, the Task Force selected Tim Taylor, who had polio when young and now has very limited use of hands and arms. Because Tim's personal ambitions had been directed toward working behind the scenes, in the production part of the entertainment media, he expanded the objectives of the Media Office.

Of 200 projects, ten percent used disabled performers or disabled material.

Briefly stated, the office intended to expose qualified disabled persons to the entertainment media; help integrate them into job positions, on the screen and behind the scenes; enlighten the general public about disability through realistic portrayal in the media; and provide positive role models for disabled persons.

The business realities of the entertainment industry make Taylor's job difficult. "Media executives," he feels "operate and make decisions primarily out of fear over ratings, audience size, and potential for a nationwide market. This is especially true with television. Moreover, the turnover in industry executives is staggering." In such an unstable business environment, "How can directors take chances on unknown disabled performers. or a production that portrays disability in a new way."

Further complicating the work of the Media Office is the small number of disabled persons available and trained to work before cameras and behind the scenes. Persons desiring careers in television, theater, or motion pictures have faced formidable barriers, which few have overcome. Acting schools, for example, have been largely inaccessible and totally unaware that disabled persons interested in the field even existed.

Taylor himself faced many difficulties as an aspiring set designer. In Cleveland, while working at one of his first jobs in the entertainment field, Taylor was fired because he drew his designs with his foot. After that, when he applied for work at various locations, he was rejected for the same reason. When Taylor registered at the Lee Strasborg School of Acting, he was the first disabled student to ever do so.

Because of Taylor and other individuals interested in disabled actors, several training programs in the Los Angeles area are now accessible to disabled persons. Moreover, the Screen Actors Guild has become concerned about disabled actors. In its April 1981 publication, the Guild printed a two-page article entitled "Options for Disabled Performers." The article listed five area programs open to disabled persons. It also included a mail-in coupon so that the Guild could identify disabled persons for a newly-established Committee of Performers with Disabilities.

Annual Media Awards

Each year since 1979, the California Governor's Committee on Employment of the Handicapped has held a media awards banquet. The fourth annual banquet occurred on February 2, 1982. This affair has become one barometer of the status of disability and of the acceptance of disabled professionals in the entertainment industry.

The first banquet was a luncheon, attended by 300 persons. Last year over 500 persons paid $125 each to attend a dinner banquet. This year 700 persons came to recognize industry achievements related to disability and to help finance the continuing efforts of the Media Office. Among those attending were industry executives, actors, and producers and directors of film production companies.

Although the entertainment industry is more open to disabled persons than ever before, competition for acting parts and for production jobs is very keen. There is no magic formula for success. Anyone seeking to enter the industry, must have talent, training, and perseverance—as well as a willingness to work very hard while experiencing failures and frustration. Even so, of the many qualified and enthusiastic aspirants, most are unemployed at any one time.

"If anyone," Taylor observes, "is willing to work like crazy to develop a career, to compete with thousands of other people - I would tell them to go ahead. They should trust their intuition, pull together all their knowledge and experience, and push to obtain interviews for jobs. Good training is extremely important, and so is experience."

Producer Mona Moore explains one way to break into the production side of the film and television business. "First of all, go to college and major in English. Then become a story analyst, or reader. Almost every executive in a decision-making position began as a reader. Until you understand story material, you have no shot at getting into a position where you are respected for your taste.

"A story analyst," continues Moore, "reads proposed materials. Then he or she evaluates the materials and reports whether or not this should be made into a movie. Successful readers become story editors, then development executives or directors. Two years as a director will give you the necessary contacts with agents, writers, and producers—and you will be on your way.

To become a reader, Moore suggests reading three books and writing a synopsis on each, using one double-spaced, typewritten page for every 50

pages of material. Give reasons why the story does, or does not, "work." Send your three synopses, your resumé, and a letter of introduction to a senior story editor of a movie studio. State that you have not been hired as a reader before, but that you are interested in an entry-level position as an analyst who would read, in the beginning, on specification.

Then wait and be patient. Do not call or write to follow-up before at least three weeks have passed. These people are very busy and often are away from their offices for weeks at a time. Also, do not plan to support yourself solely on your earnings as a story analyst. View this as part of your training.

Patience and perseverance appear as factors in the success of many disabled persons in the entertainment media. Gerri Jewell is a good illustration. She became known as a comedienne only after years of solitary effort. In high school she first decided that her ambition was "to be like Carol Burnett." Despite discouragement from teachers and counselors, Jewell took theater arts classes in college.

Acting as her own press agent and manager, she then gained exposure in local comedy nightclubs. Finally, Jewell became known well enough to be asked to entertain at the media awards banquet in 1981. Producer Norman Lear was so impressed with her talent, he asked her to do a guest appearance on "Facts of Life," an NBC television show. This led to her current contract for appearances on several episodes of "Facts of Life" during the current season.

Gains to Continue

The entertainment business is not like ordinary employment situations. You don't just walk in, fill out an application, and have an interview with a personnel manager. A person aspiring to be an actor or a behind the scenes professional must have talent, training, patience—and luck in being at the right place at the right time.

The number of disabled professionals in the media has grown phenomenally, and the manner in which the media treats disability materials has improved. This has been no one-year fluke inspired by 1981 being the International Year of Disabled Persons (IYDP). According to Fern Field, who helped establish the Media Office. "Those who are working to help bring disabled individuals into the media," she affirms, "do not consider the IYDP as the end, but as a starting point and the beginning of changing attitudes and opening doors. That is why the theme of this year's media awards banquet was 'Moving On.'"

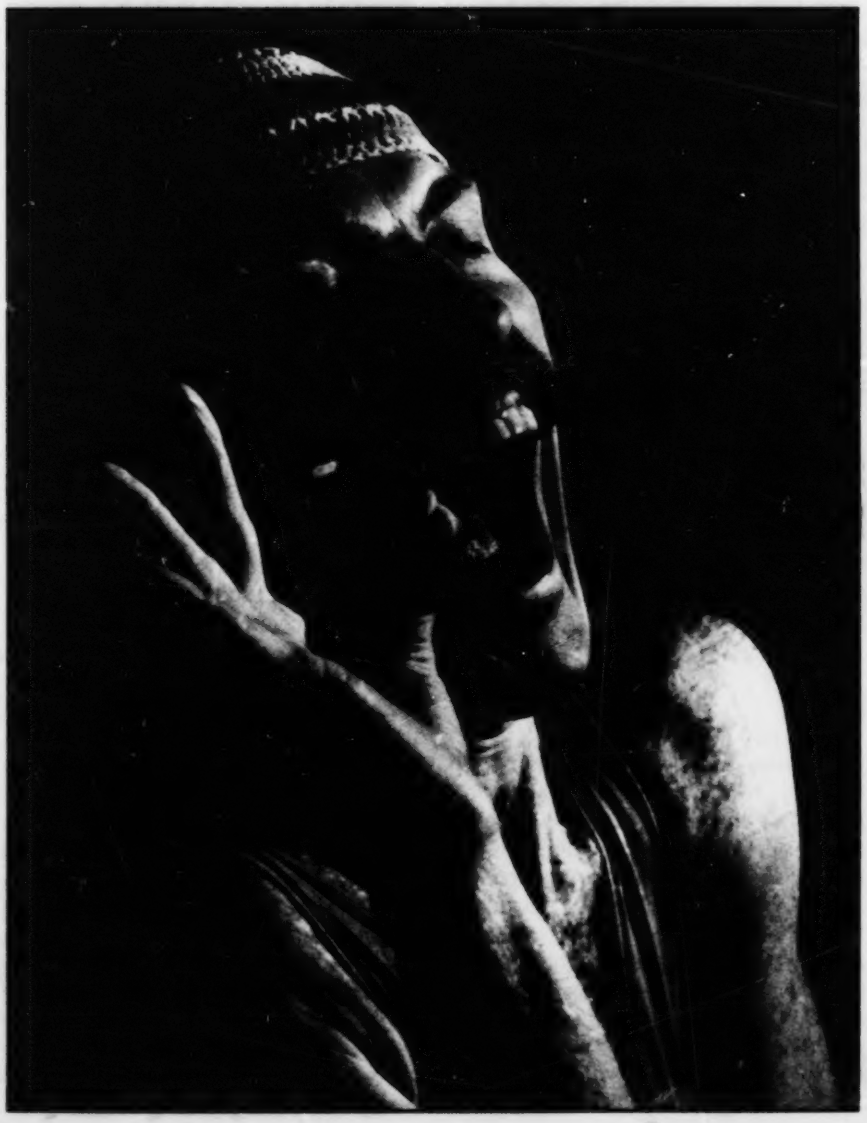
People who have been actively mainstreaming the media are trail blazers. In a seemingly impenetrable field of employment, they have opened a few doors and enlightened some people's attitudes. They have begun the conquest of a new frontier. Because of these efforts, disabled people will find the entertainment industry less concerned about an individual's impairments and more about his or her talents.

—Jim Hammitt

Mr. Hammitt is a free-lance writer.

Image and Identity

Marketing Disabled Adults In the Media



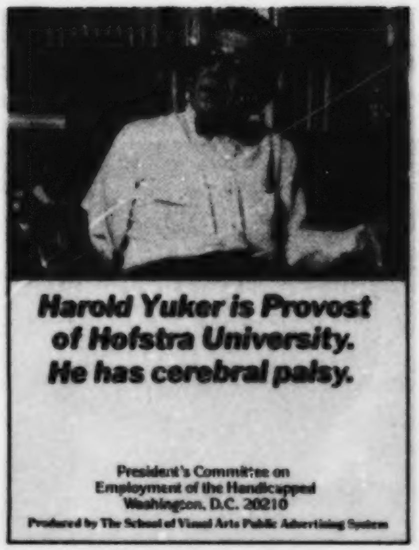
The lack of a positive public image hampers the quest by disabled persons for social and economic integration. For what the public thinks about and how it reacts to a group of people helps determine that group's "place" in society. On the whole, the "place" of disabled persons can be characterized by restrictions and limitations that the public associates with disability.

Society's major image makers include leaders in government, business, the entertainment industry, and other institutions. Through the media, these image makers influence the public by projecting opinions about being disabled that the media interprets into images and ready-made identities for disability. How the media portrays disabled individuals, then, shapes the public's attitude.

On telethons, fundraisers present images of need and vulnerability that underscore an identity of dependence. Motion pictures and other forms of entertainment frequently portray disabled people as extremely brave and perseverant or, alternatively, as emotionally unstable and desperately searching for love and acceptance.

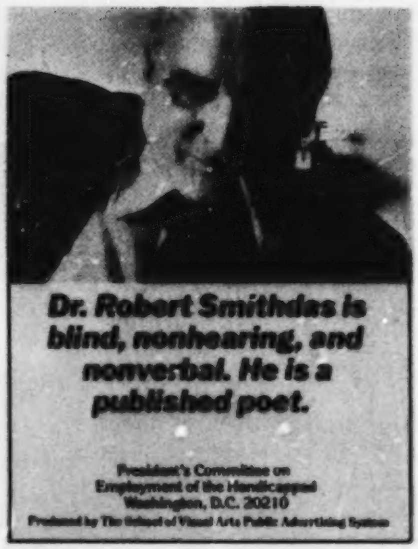
News stories generally show a disabled person as an outcast. He or she is either dissatisfied with society's response to the needs of the handicapped, or is achieving goals incredible for anyone so impaired.

In light of all this, is it any wonder that the business world ignores disabled adults as consumers and media performers? Indeed, because of a poor public image, disabled people are practically nonentities in the world of commerce and entertainment. Quite naturally, the people who sponsor television shows and finance theater and film productions are reluctant to show disabled people in realistic roles. Those who underwrite product advertisements understandably fail to recognize disabled persons as part of the buying public.



Harold Yuker is Provost of Hofstra University. He has cerebral palsy.

President's Committee on
Employment of the Handicapped
Washington, D.C. 20210
Produced by The School of Visual Arts Public Advertising System



Dr. Robert Smithdas is blind, nonhearing, and nonverbal. He is a published poet.

President's Committee on
Employment of the Handicapped
Washington, D.C. 20210
Produced by The School of Visual Arts Public Advertising System

Supporting the place of disabled persons in contemporary society is the absence of good statistics about the disabled community. The business world is totally lacking in information about disabled adults which is necessary for establishing a marketing identity. Questions such as Who are disabled adults? Where are they? What are their incomes? What do they buy, read and watch on television? are unanswerable.

Moreover, business ignores even posing such questions in marketing research. Statistics available from government sources are not the type that stimulate business to perceive disabled people as part of the buying public. Thus, disabled people have no market identity. As a result, manufacturers and providers of services (including entertainment services) avoid addressing disabled adults as a population to woo and to win.

This problem image and identity is an important obstacle to fully integrating disabled people into advertising, product marketing, and other manifestations of social equality and public acceptance. Public opinion polls support this observation by showing that the public desires programs to assist disabled persons. Obviously, the public sees disability in terms of neediness and lack of self-determination. Consequently, programs are organized which treat disabled persons as dependent persons, incapable of fully participating in society. The existence of programs espousing this attitude in turn validates the public's image of disability.

Given this situation, can a better, more realistic image and marketing identity for disabled persons be possible? The efforts of the President's Committee show that it can happen. Our public service advertising campaigns have long been designed to offset traditional attitudes toward disabled adults. But starting in the mid-1970's, we developed a marketing concept which, for its time, was revolutionary.

Working with the faculty and students of the School of Visual Arts in New York City, we designed materials for print and television advertising that presented disabled people as capable, serious persons. With an equal opportunity, they would be just as naturally successful as able-bodied persons. To present this new image and identity, our marketing strategy involved far more than merely featuring a casual picture of a disabled person. Visually and verbally, each advertising material focused on the individual qualities of disabled adults and their rights and interests, even when this conflicted with prevailing professional wisdom.

The more recent advertising campaigns of the Committee have been unique in another respect. We have purposely addressed a dual audience—business people and disabled individuals. Because the image and identity that disabled people have of *themselves* goes hand in glove with the public's, we presented disabled people with good role models. By featuring, in our advertising materials, disabled adults who were competing successfully in society, we wanted to encourage other disabled adults (and especially those who could benefit from further education and additional job skills) that it was possible for them, too.

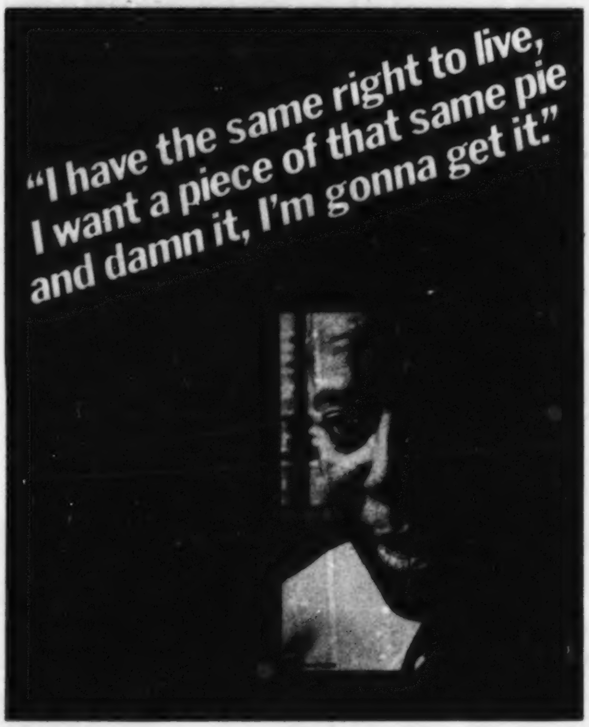
Make no mistake, getting society to absorb a new image and identity for disabled adults is larger than the resources of any one agency or institution. Nevertheless, the impact of each effort can be quite pervasive. With the limited resources and small budget available to the President's Committee, we provide each year some 4,000 business, trade and consumer publications with good quality, attractive, and effective public service materials. One indisputable sign that we have begun to affect a more positive image and market identity for disabled adults is the fact that businesses and professionals in the media are contacting the Committee. These individuals have seen our ads and want to know how to reach disabled adults effectively as consumers, as audience, and as potential employees.

In the years since the President's Committee first instituted a modern marketing plan, we have learned that we were in the forefront of using marketing tools to further a social cause. Academicians discovered in the 1970's that marketing could be adapted to social programs with benefit to both the programs and its recipients. Nowadays, there is strong interest in the use of marketing concepts in the nonprofit world.

Anyone contemplating developing a marketing plan must keep one thing always in mind: You cannot be successful by simply presenting whatever image and identity you find appealing. The public generally has a point beyond which unusual or unfamiliar images will backfire on the advertiser. Marketing strategies can be agents for social change, but successful ones stay abreast of what the public can tolerate.

A selection of advertising captions from different materials developed over the years by the President's Committee illustrates this principle. In the 1950's and 1960's the depersonalized slogan "Hire the Handicapped—It's Good Business" was used extensively. In 1975 we developed a more personal slogan, "I Do. I Think. I Feel." The 1982 ads do not utilize catchy remarks as slogans. Instead there are various captions for different public service materials.

The headline of one print material proclaims "I have the same right to live, I want a piece of that same pie and damn it, I'm gonna get it." The quote is from a past Handicapped American of the Year, and it forthrightly expresses his view on his place in society. It's a strong ad, one that would not have been possible a few years ago. Yet it presents the public with a new and acceptable image of disability.



From a marketing standpoint, disabled adults are a solid "product." The millions of dollars in donated public service space for the President's Committee's advertising materials verify this. Marketing an image and a new identity for disabled adults is possible with planning, intelligence and creativity.

—Robert Ruffner

Mr. Ruffner is the director of Communications at the President's Committee.

Can Disabled Things Go Better With Coke?

A sports enthusiast from California. An 11-year-old girl from Las Vegas. A Hollywood stunt woman. Several children and adults in Canada. These disabled individuals today comprise a small and select group. By means of television commercials and guest interviews, magazine ads, and merchandise catalogs, these people are doing promotional work to the general public.

But not one of the individuals posed as a poster person, solicited contributions to fight a "crippling disease," or promoted a "handicapped" issue. Neither did they work for free. Instead, they were hired or retained by agencies and organizations in order to encourage the general public to purchase products or pursue recreational activities.

These disabled individuals are literally doing what few have done before. Fearing association with negative stereotypes, industry has steadfastly ignored (or refused to allow) the participation of disabled persons in commercial advertising.

Of course, past exceptions do exist. These, however, prove the validity of the observation just made. Individuals like Ray Charles and Itzhak Perlman have established public identities as famous performers. With such promotional subjects, advertisers feel they can avoid having the disability distract the public from the merchandise being advertised. But what has happened in the past year is so unusual as to be revolutionary.

* * *

A longtime enthusiast for many sports, Jim Worth has used a wheelchair and crutches for the last fourteen years because of an amputated leg. Of the several sports he has continued to pursue as a disabled person, one is bowling. He is no "supercrip," reeling off 300-point games left and right. His average approximatey equals the national average for all male bowlers.

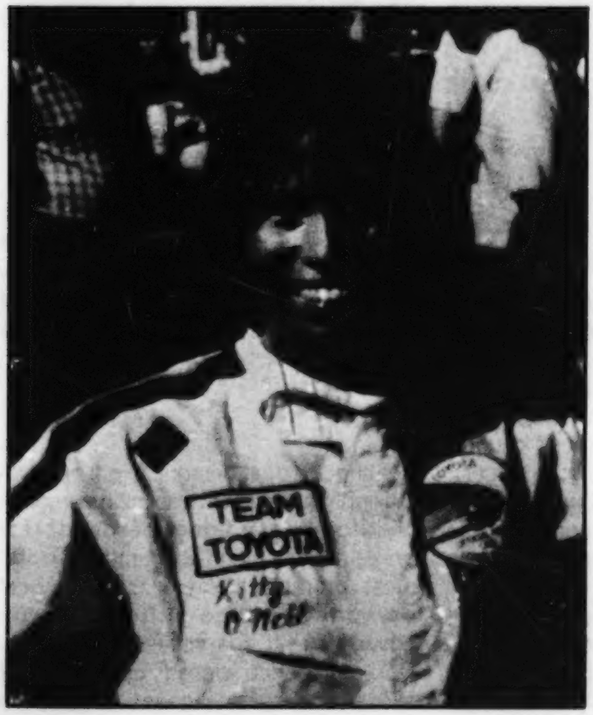
In May of 1980, the National Bowling Council selected Worth to be its traveling ambassador. For an entire year, Worth toured the country, speaking on television and at public gatherings, spreading the word that bowling was an enjoyable pastime for everybody, able-bodied and disabled, children and adults.

A public relations professional who worked with Worth remarks that, in selecting Worth, the Bowling Council had a dual purpose in mind. The Council wanted "to promote bowling by means of a wonderful athlete and a wonderful person," and to help observe 1981 as the International Year of Disabled Persons. Never were there any doubts or second thoughts, says the professional, about Worth's impact on the public: He turned out immediately to be an excellent spokesman for the Council.

Whether on television or at a public function, he was consistently well-spoken, candid, spontaneous, charming—and adept at handling interviews and questions effectively. "He was amazing in his ability to plug the Council without looking crass." Moreover, because of Worth's disability, the media showed much more interest in him than in previous Council ambassadors. "With Worth as our representative, we reached tens of thousands more people than we had anticipated."

* * *

After performing stunts in motion pictures for several years, Kitty O'Neil, who is deaf, has gained the respect of her industry. (For more background on O'Neil, see "Kitty O'Neil: Breaking the Sound Barrier," in "Disabled USA," Volume 2, Number 10, pages 15-17.) One consequence of her stature has been her use to endorse a well-known liquor. Dewer's Scotch Whiskey has a



long advertising tradition of featuring individuals who, although not exactly famous, have achieved much in their careers.

O'Neil's endorsement took the form of a full-page advertisement that was marketed nationwide, for instance, in "Newsweek" magazine. Although the ad indicates O'Neil's disability, it is communicated as simply one aspect of O'Neil's interesting background. The ad presents O'Neil as a successful professional who, along with other traits, is also hearing impaired.

* * *

In Las Vegas, Nevada, Jody Johnston teaches acting to aspiring child performers. Johnston's mother, the late entertainer Tody Fields, had urged her daughter to include disabled children in her classes. Some of Johnston's disabled students have gone on to repertory theater groups for the handicapped. Last year, one student landed an assignment in an entirely different direction. Eleven years old and a wheelchair user because of multiple sclerosis, Rhonda Frost found herself one day before hot lights and video cameras and doing a television commercial for children's dolls.

An advertising agency for Mattel, Inc., had decided to include a visibly disabled youngster among the children enjoying a new Barbie Doll. Through another agency, which searches for television commercial models, Johnston's school in Las Vegas was contacted, and Frost hired—because she was disabled *and* professionally trained.

Unfortunately, the full potential impact of Frost's work has not yet been realized: The commercial has not been aired. In fact, according to Mattel, the new product which Frost was hired to promote has sold so well without an ad campaign, no airing of the commercial is planned. But at least Frost was paid for her work, and the professionals involved had the benefit of working with a disabled person for commercial purposes.

* * *

In Canada, the Canadian Paraplegic Association decided, as a goal for the International Year, to encourage retail department stores to use disabled models in merchandise catalogs. The effort paid off. The December issue of the Association's magazine, "Caliper," reports that "The Robert Simpson Company, Limited, used three paraplegics in their retail and fashion advertising in a March 7, 1981 fashion supplement. They have plans to use three paraplegics in a book currently being readied, and have indicated a willingness to continue both this year and in the future to use paraplegics whenever possible."

During the summer, a Sears catalog that circulates in Canada featured a disabled child. Three other major department stores in Canada are also considering the use of handicapped persons in retail advertising. "Happily," continues the "Caliper" article, "because of the lead time required, appearances with these companies will likely take place in 1982, thus prolonging and solidifying the permanency of the change that this unique project has brought about."

* * *

Although deaf persons might not hum the jingle to the latest television commercial for a shampoo or deodorant preparation, they do consume these and other products. Like all people, deaf persons can be influenced by advertising—if it is accessible to them. Not long after closed captioning of television programs began, a Chicago advertising firm realized that captioning presented its manufacturing clients with an opportunity to sell to the hearing impaired market. Without fanfare and with no lobbying from the deaf community, the practice of captioning commercials began.

By last summer, over 70 industries were airing commercials with closed captioning for deaf persons. Then the American Association of Advertisers promoted the practice with an official endorsement to its membership. The Association asked "all account supervisors to ensure that the captioning of client commercials is facilitated" because hearing impaired people are "a part of all that television offers to all citizens." Now, over 100 corporations, ranging from Ace Hardware to Xerox, caption television commercials.

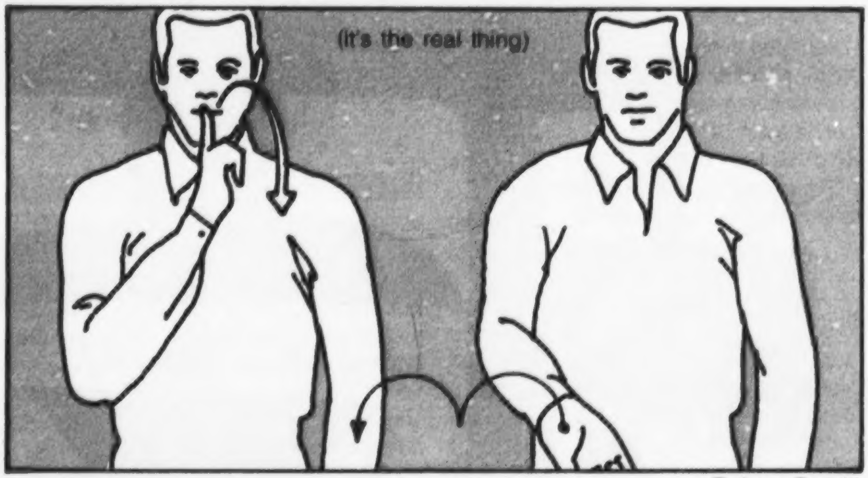
Not all attempts to mainstream the advertising media have been successful. One in particular illustrates the resistance in the industry to including disabled persons in commercial advertising. In the summer of 1980, the Maryland Governor's Committee on Employment of the Handicapped wrote the Coca Cola Company and urged its public relations staff to include handicapped persons among the models used in Coca Cola's television commericals, which the letter commended for being "among the most pleasing on television."

In its written response, Coca Cola remarked that using disabled persons in commercials "has been an area of concern and discussion for quite some time, not only within our company, but in the entire advertising industry." As far as Coca Cola was concerned, the result of reviewing the matter from all points of view was a fear of misunderstanding if a disabled person were part of one of the company's commercials. "We would not wish to have our advertising messages misinterpreted by those who may feel that we sought to capitalize on the physical handicaps of individuals in order to 'sell a product.' "

During 1981, the International Year of Disabled Persons, no Coca Cola commercial included a visibly handicapped person. The irony in the company's policy is obvious—and even more so in light of the fact that Coca Cola captions its commercials in order to sell its product to the deaf community.

Of course, it is unfair to single out one corporation without mentioning that thousands of companies behave similarly. Furthermore, other companies that caption their television commercials also do not permit handicapped persons to promote product sales. (One striking exception is IBM. A magazine advertisment for IBM features a disabled employee offering the reader an IBM business card clutched between the tongs of the employee's prosthetic hand.)

Nevertheless, in light of the gains that have been make last year, it still seems possible to give a sigh of appreciation. In a new and astonishingly powerful medium—commercial advertising—disabled people are just beginning to participate fully as individuals with talents, and not as objects stigmatized by a disability label. But thoughts of real progress can now be entertained. Some day, perhaps soon, we will see a blind person in a television commercial heft a cold, gleaming 16-ounce bottle to his or her lips. Then, in order to sell the product to hearing impaired persons who don't have telecaption adapters, the blind person will sign ▽ ▽ ▽ ▽



—Robert Gorski

Alan Toy

Actor And Activist

You have seen him on television. On an episode of "M.A.S.H." Several times on "Trapper John," and most recently on "Today's FBI." Probably you did not really notice him. On "M.A.S.H." he played a wounded soldier.

On "Trapper John" he played a doctor standing in the background. His Canadian crutches were clearly visible on the screen, but not conspicuously so. Nothing about the scene drew the viewer's attention to the fact that a disabled actor was part of the performance.

At age 31, he has been a professional actor for seven years, practicing his skills in a field that is just beginning to allow the participation of disabled individuals. "I want to be a star," is Alan Toy's ambition. "Not a disabled star, but a star who happens also to be disabled."

Toy's performance skills win him roles on television and in movies. But the opportunities for trying out for those roles have been the result of a changing attitude in the entertainment media toward disability. Many people have been involved with helping the industry change. One of these individuals has been Alan Toy.

As long ago as 1979, Toy was a member of the Council of Disabled Artists. Organized, in Los Angeles, by entertainment figures, disabled actors, and interested members of the Beverly Hills Bar Association, the group promoted the hiring of disabled actors and more realistic portrayals of disabled people.

The Council found a focus for its efforts after the broadcast of "Thou Shalt Not Commit Adultery" on prime time television. This movie concerned a husband who sustains a spinal cord injury and the pressures on his wife to seek sexual satisfaction with other men. To Toy and the rest of the Council of Disabled Artists, "Thou Shalt Not" was sensational and factually inaccurate, doing disservice to spinal cord injured persons and all disabled people as well.

"I want to be a star . . . who happens also to be disabled."

Of course, nothing could be done about the fact that the film had been produced and broadcast. No chance existed of encouraging the broadcasting network, NBC, to apologize for or retract the airing. Yet something could be done about the scheduled re-run of "Thou Shalt Not" during the summer season.

Because of the Council's association with the Beverly Hills Bar, it had some clout. When the Council requested a meeting with NBC executives, the request was granted. At the meeting Toy and his colleagues explained their objections to the film. Although the executives were surprised at criticism of a film they had thought sensitive and accurate, they were won over and agreed not to re-run the movie. This was no easy decision. In Toy's opinion, the decision ultimately cost the network about $100,000.

Since the burning issue of "Thou Shalt Not" gave Toy and the Council access to network executives, they made use of the opportunity to express their concerns about the general portrayal of disability on television. Eventually, the NBC executives agreed to have a policy on presenting disability in a more positive and accurate fashion.

"The controversy about 'Thou Shalt Not' made the industry trade papers," recalls Toy, "and so did the agreement to present disability in a better way. This was an unprecedented concession in the television industry, and it has helped change attitudes in the other networks."

By all appearances, these changes in attitude come at just the right time. In the last three years the entertainment media, and television in particular, have shown enormous interest in stories that focus on or include disabled characters. The range of disabilities, moreover, presented in the media has exploded.

Years ago, Hollywood treated paraplegia, amputation, and blindness as if these impairments were the only ones "acceptable" to the public. One of many examples that illustrate this point is the 1940's movie on the life of Grover Cleveland, an outstanding baseball pitcher. (Ronald Reagan, by the way, played the title role.) In real life Cleveland had epilepsy, which did have an impact on his life. But no mention of this was made to the viewing public.

In contrast, television viewers currently are exposed to an unprecedented range of disabilities. This includes quadriplegia on an episode of "Different Strokes"; two deaf characters in the movie "Dummy"; and mental retardation in the movie "The Kid From Nowhere." And epilepsy was featured about a year ago in an episode of "Happy Days."

In general, the disabled community is indicating that current media portrayals of disability have improved greatly. But of course not absolutely. There are still moments, and even entire productions, that cause teeth gritting and aggravation to hearing impaired viewers, to those with congenital disabilities, and to others. But most disabled people feel that the progress in the last few years has been close to astonishing.

"Portrayal of disability in the media is no longer the biggest issue," states Alan Toy. "The most important issue now is the use of a disabled actor to play roles in which the actor's impairment is not part of the character, or at most it is incidental to the character. The industry finds this change from past practice difficult to support. At bottom, it's a money issue. It's a matter of market identity: Disabled actors are not seen as 'bankable' performers.

"It is true that disabled actors often don't have a lot of professional background. Also, production executives worry about distracting the viewing public. And of course many people in the industry have the same misunderstandings and hangups about working with disabled persons that occur in other employment fields.

"But fundamentally, the media lacks confidence that actors who are disabled can help the industry sell tickets and secure high ratings. That is how the industry generates profits."

Next to acting, Toy's current interest is encouraging the media to hire disabled persons for roles in which the disability is not part of the character or the plot. This has coincided with the development of a new forum from which to make changes in the industry.

Toy is devoting some of his time and energy to working with the Screen Actors Guild. After years of ignoring the participation of disabled actors in the media, the Guild has established a Committee of Performers with Disabilities. For Toy, this is an important development since it allows him to work from inside the media. The Guild, moreover, is a crucial and influential segment of the entertainment industry. Says Toy, "You can't have motion pictures and television programs without the cooperation of the Screen Actors Guild. The Guild gives us legal support, moral support, and a credibility within the industry that is wonderful."

Eventually, Toy hopes to see motion pictures and television programs routinely hiring disabled actors to play feature roles and background characters. One step toward this is exposing industry personnel to disabled actors without pressure to employ them for specific roles. Toy plans to help set up weekend auditions for panels of casting directors during which disabled actors can demonstrate their performance skills. The casting directors will assess the talents of the actors and the best performers will then audition for production executives.

Behind this arrangement is the idea that decision-makers in the media need to see for themselves that disabled persons can play non-disability roles successfully. Hopefully, the industry personnel will go away from these auditions more receptive to disabled persons in general and more confident that employing them will not diminish profits.

"The issue now is . . . to play roles in which the impairment is not the character."

Similarly, Toy plans to address the professionals who author and adapt the materials from which motion pictures and television programs are produced. Periodically, Toy will be arranging seminars for screenwriters. During these seminars, screenwriters would meet disabled persons, and learn about disabled lifestyles and to what extent traditional attitudes about disability are accurate or erroneous. This will, of course, further improve the portrayal of disability in the media. But it is also important for screenwriters to realize that a disabled person can play any role naturally and effectively.

Over the years, black actors have progressed from being excluded from the media, to being cast in "black" roles only, and finally to playing characters in which race has no significance. For Alan Toy and other disabled actors, the time for them to achieve full participation in the media is now at hand. There are many indications. One is that NBC, the network that broadcast "Thou Shalt Not," won recognition as last year's outstanding media employer of handicapped persons. For other indications, just turn on your set and watch closely.

—Robert Gorski

Give This Man A Star

Mainstreaming TV Contestant Shows

"Everybody is saying 'It's about time,' and they can't understand the reluctance of the television executives. The people who work on TV game shows are ahead of the people who produce them."

Paul Longmore is succeeding in mainstreaming a part of the television broadcast industry where few if any visibly disabled people have been before. It began as an assertive response to the frustration of discrimination. After Longmore was rejected out of hand by the contestant coordinator for the game show "Jokers Wild," he wrote the producers of the show.

In his letter, Longmore underscored the advantage of including disabled persons among game contestants. Many disabled individuals, he said, have just the kind of personality that game shows go to considerable lengths to locate. Then Longmore carefully, and without sounding threatening, observed that if the game show industry did not reform discriminatory practices against disabled people, the industry would face the same criticism aimed at some telethons, and also the possibility of monitoring by the government.

Longmore closed his letter by emphasizing the positive. He stated that the public was ready to accept visibly disabled people on game shows without being distracted or made uncomfortable. In reply, Longmore received a phone call from Dan Enright, one of the program's two coproducers. After a number of succeeding phone calls, a new direction for "Jokers Wild" developed. The show would begin evaluating disabled applicants on the same basis as able-bodied ones—that is, according to their knowledge, personality, and ability to perform the physical activities required during the show.

From the start, Longmore never found Enright really biased against disabled people. Rather, he was greatly misinformed about handicapped people and hesitant to take a new look at them in relation to his show. Nevertheless, he was sincere in "wanting to do the right thing."

So Longmore began to familiarize Enright with disabled people and suggest how they could more easily participate in game shows. The first step, said Longmore, was to "assure Enright that I was not a handicapped Jerry Falwell. I was not there to tell Enright what to do, but to explain how it could be done."

As a result, Enright agreed that disabled applicants should not be rejected out of hand. As long as they could perform the physical activities required of contestants, disabled applicants would be evaluated the same as able-bodied ones. Secondly, Enright was interested in exploring how the game show stage could be redesigned to accommodate mobility impaired people. Later on, he would like to consider ways of restructuring "Jokers Wild" to accommodate hearing and visually impaired persons.

Finally, Enright declared his interest in actively recruiting disabled persons for the show. Longmore supplied him with addresses of disability groups, service agencies, and appropriate publications in Los Angeles where news releases, that would advertise for disabled applicants, could be circulated. Generously, Enright even offered to send his contestant evaluators into the community anytime at least 20 disabled applicants were at one location.

The results so far? Contestant evaluators have gone to over 15 locations and contacted approximately 250 disabled persons. Also, a total of 15 disabled persons have contacted Enright's production office individually and inquired about applications. Of all the people interviewed, a few have survived the rigorous assessment that all applicants go through.

One ambulatory disabled applicant has become a final contestant. He was filmed last December playing "Jokers Wild" and winning $9,000. The show in which he participated has now aired in most areas. Two contestants who use wheelchairs are scheduled for filming as soon as special desks, that can be raised and lowered to the most convenient height, are installed on the television stage.

Longmore cautions disabled people to be realistic about participating in game shows. "Game shows are constantly interviewing and trying out hundreds of people in order to select the few who finally end up before the camera. Only 1 in 40 applicants are ever successful."

Still, Longmore encourages disabled people to tryout. For the individual who does, there is of course the potential benefit of substantial winnings and the excitement of appearing on television. But the community as a whole will also benefit.

"Getting disabled people on game shows is a way of counteracting the news story portrayal of disabled people in heartrending predicaments, heroic exploits, and situations of social and political controversy. Game shows are a powerful way—because of the daily exposure before massive audiences—of presenting disabled people to the public in a positive manner."

—Robert Gorski

Disabled persons interested in more information about appearing on television game shows may contact Paul Longmore by writing to him at 326 E. Colorado Blvd., #122, Pasadena, CA 91101.

Tune In the Handicapped

Disabled Adults Direct A Radio Station

Over 8,000 radio stations operate in the United States today, broadcasting news, music, commercials, talk shows, and other features. Most stations choose to serve a social or ethnic group as a target audience. For instance, a station will design its daily program for the listening interests of teenagers, busy professionals, Hispanics, or people who like jazz. Since disabled persons have no identifying cultural or social characteristics, it would seem doubtful for any station to focus on disabled persons as part of its radio audience.

A noncommercial station in southern Connecticut defies this expectation. At WMNR-FM, daily programming is designed for a specific social and economic segment of the surrounding population—and it also caters to the information needs of disabled persons. Moreover, disabled persons dominate the staff of the station, whose annual budget is close to $200,000.

Until last spring, the music portion of the daily programming was rock and roll. "Then the change in federal funding priorities hit us," recounts general manager Stewart Nazzaro, "and I had to start looking around for other funding sources. It was much more likely that a fine arts program would attract corporate support, so we've been programming classical music since May. After we increase our poweroutput, we'll start soliciting listener support."

Besides playing recorded music over the air, WMNR also broadcasts concerts of the Yale New Haven Symphony, as well as other fine arts programs of the university's School of Music. Some of the broadcasts are syndicated and sent to other radio stations around the country.

WMNR also airs public affairs features. Some of these originate from radio networks such as National Public Radio. Other features are produced at WMNR by the staff of the station. Examples of this type of feature include interviews with jazz musician Chuck Manjioni and with actor James Earl Jones, and a series called "The Bridge," which explored a variety of personal issues affecting teenagers.

To serve handicapped listeners, WMNR concentrates its public service announcements on agencies and opportunities, in the local area, of interest to disabled persons. In addition, once a week "Job Hunt 88" lists job openings that are assured of being available to the handicapped. Often the subject of a talk program, "Connecting," is related to disability. Past subjects of interviews have been a disabled woman active in lobbying the State government, a disabled musician, and representatives of community programs that serve the handicapped.

WMNR also operates a hotline for handicapped persons, inviting questions on employment, health and education. If the staff of the station cannot answer a caller's question, they find someone in the community who can.

Why such programming isn't done more extensively is a matter of balancing audience interests. "We don't want to inundate our schedule with handicapped issues," says Nazzaro, "because it would alienate our wider audience. We want that audience to know that we, disabled people, can do a professional job. That is our main message." Formerly, WMNR announced periodically that the station was operated by disabled persons. But that has been discontinued in the belief that in radio an impairment is invisible and irrelevant.

Along with serving disabled persons in its general programming, WMNR also utilizes some of its radio technology exclusively for the handicapped. A portion of the radio signal, called the side carrier, can be used for special subscriber purposes, such as broadcasting Muzak to stores and professional offices that have special FM receivers.

WMNR is lending the use of its side carrier to the Connecticut Radio Information Service, which reads news bulletins, newspapers, and periodicals to print handicapped persons.

STAFFING

WMNR has five positions for full-time staff persons and three positions for trainees. Over the years, the staff has represented a variety of disabilities. Stewart Nazzaro, the general manager, is legally blind and a graduate of Syracuse's Newhouse School of Journalism. Besides his love of radio, Nazzaro brought to WMNR a knack for grant writing and a persistance in patiently scaling uncharted territory.

In two years, Nazzaro has raised over $200,000 from government, local foundations, and corporations. With some of this money, WMNR will increase its power output and blanket all of southern Connecticut. The station will also install a satellite receiving dish, so that news, public affairs, and other programs from the National Public Radio Service can be relayed conveniently to WMNR's audience.

Past employees have also been disabled persons. For some of these, WMNR was their first job opportunity. Paul Cartis has a motor sensory problem, and he directed the music program when the station had a rock and roll format. He is now a sales person in the record department of a major department store.

Before Cheryl Boucher worked as administrative assistant at WMNR, she was pretty much homebound and had never done a job interview. Now Boucher is a secretary at a local health facility. Other handicapped former employees have seen fit to stay in radio and simply move to other stations. But WMNR was their starting point. For some it was a point of return to productive activity.

WMNR also has a corps of volunteers whose expertise and support help sustain the station's activities. Most of the volunteers are able-bodied, and John McVane is an outstanding example. For many years, he was the United Nations correspondent for ABC News. Before that, he worked for the old NBC Blue network and covered the liberation of Paris at the end of World War II. At WMNR, McVane acts as a mentor to

new employees, helping them learn writing for radio, broadcast style, and the basics of production.

FUNDING

Like other nonprofit activities providing community services, many public radio stations are making special efforts to develop nongovernment sources of funds. WMNR is no exception to the new emphasis on soliciting funds from corporations, foundations, and local philanthropic groups, such as the Lions Club.

Located in southern Connecticut, WMNR is near many large businesses that value positive relations with the local community. Consequently, Sewart Nazzaro spends much of his time targeting the corporations most interested in community relations. Sometimes, fund raising has influenced WMNR's operations.

"The process usually takes months. It involves making initial contacts, finding out the audience about which the company is concerned, and how that company wishes to address that audience.

"The key is to find out the company's needs.That takes a lot of time—you have to build a relationship. Later, at a face to face meeting, we make a 40-minute presentation of our business plan. We use flip charts to show our coverage area, or we might use a slide show to tell part of our story. It really depends on the company.

"Back in March, I thought we might lose the station. I had to think about what these companies want to contribute, if at all. This part of Connecticut has no classical stations. We're on the fringe of New York and Hartford, where there are classical stations, but they don't come in well.

"I saw a niche in the market. Fortunately, the classical music audience also happens to be the same group to whom large corporations wish to communicate a positive image. The change in music format at WMNR was directly related to our fundraising efforts."

Helping WMNR attract corporate contributions are broadcast rules which allow the station to recognize a corporate contributor by more than mere name alone. For instance, at the beginning and end of a program, an announcer informs listeners that the program was made possible in part by an underwriting grant from a local bank. Then the announcer mentions some of the customer services, such as certificates of deposit and NOW checking, available at that bank.

A change in WMNR's own business status also helps attract contributions. Originally, the station was licensed to the local Board of Education. Soon after becoming the station's general manager, Nazzaro formed a separate, nonprofit company, Access Broadcasting Company, for WMNR. By being an independent entity (as opposed to being a facility of community government), the station was more apt to secure support from local businesses and foundations.

GOALS

For a long time, WMNR's community has been attempting, without success, to find a radio station in the area which would affiliate with National Public Radio. A station with a predominately disabled staff and a focus on a disabled audience, a station using radio as an employment vehicle and an image generator, will finally bring this service to the community.

At the time of this printing, WMNR awaits final approval from the Federal Communications Commission to boost power output to 9,000 watts. Another development in the near future will be a satellite receiving dish permitting the station better access to network radio signals.

In the last two years, Nazzaro's personal goal has been to show his community that disabled persons are really quite able. In many ways they will perform as well as the rest of the working population. In some ways a good percentage of disabled people, perhaps because of their impairments, will overachieve. By being a measurable success, WMNR testifies to the dynamism and capabilities of handicapped people.

Regarding the future of the station and of himself, Stewart Nazzaro remarks, "WMNR and I are kind of synonymous right now, but as soon as we become autonomous, and there's no need for me anymore, I'll move on. The proof of your work is told after you've left."

Some day Nazzaro expects to try his hand at commercial radio or television. Until then, he will continue to steer WMNR toward its goals.

—Larry Chase

Mr. Chase is a free-lance writer.

Photographs by Flo Fox

A Review of *Asphalt Gardens*

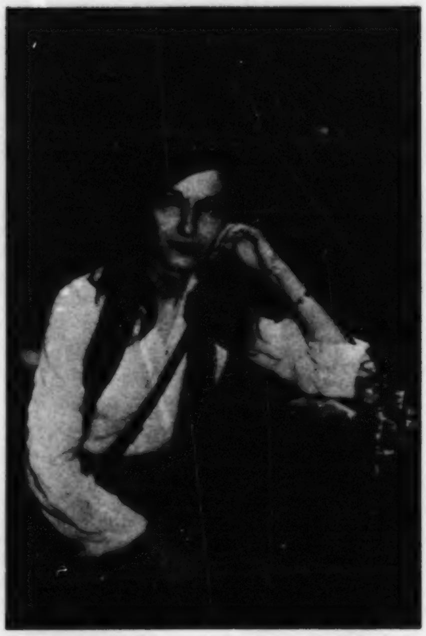
A lush, growing bush grows through a sidewalk grate. The shadows of tree branches mingle with the dark lines of cracked concrete.

A dog looks intently over a collection of newspapers, bottles, and other garbage strewn before a townhouse. Teenagers relax on a graffiti-covered cement slab in Central Park. In these images, life overcomes the cement and asphalt of an urban setting.

Asphalt Gardens, a book of photographs taken by Flo Fox, who is a professional photographer and legally blind, captures the feeling of New York City. New York is a crowded, bustling place, bursting with energy. It can be overwhelming, intimidating—and impersonal. People's glances rarely meet; their voices drown in the sounds of traffic and construction; their buildings are divided into cubical areas for living and working. Yet people assert their humanity, their hopes, and their joy in living, like the bush fighting through the sidewalk grate. New Yorkers are flowers in an asphalt garden.

Fox's work has much irony, often underscored by the titles of the photographs. One picture shows a carriage horse tied to a phone booth in which the horse driver is making a call. "Three Minute Parking" is the title.

There is irony also in the relation between Fox's disability and photography. Since she was born, Fox has had sight in only one eye. Because only one eye is used to snap photographs, Fox took naturally to the camera lens, which projects an object or a person from life into a two-dimensional image. "I always knew what I was seeing though the lens without adjusting for the camera's lack of the third dimension," she explained. "I always got the best shot, full-frame, exactly as I wanted it."



For a long time, photography was a hobby for Fox. Her career was costume tailoring for television commercials, theaters, and films. When the vision in her one good eye began failing, she chose photography as a career. "What else could I do?" she commented philosophically. "I couldn't continue tailoring, and I couldn't be a waitress because I used a cane."

Nevertheless, as she lost more of her sight, photography became a very frustrating activity. Her inability to precisely focus her camera lens resulted in blurred, poorly lit photographs. Fortunately, by 1978 a new "autofocus" camera came on the market. With this camera, equipped with what amounts to a small computer, Fox could take pictures without first calculating depth of field, aperture size, film speed, and amount of available light. Using the autofocus camera, Fox resumed taking good quality photographs.

Ironically, because of blindness, Fox improved in artistry. Once she had the autofocus camera, she began to give instruction in photography to visually impaired persons. "In my classes, I met talented, partially-sighted photographers," she explained. "I began to learn from my students." As a consequence, Fox collected many of her best pictures into a proposed book. Each one of the 18 publishers she approached, however, rejected her project.

To get herself and her work some exposure and recognition, Fox traveled through Europe in 1980 and convinced many gallery owners to exhibit her photographs. "I went to one owner and said, 'You don't know me, but in the United States, I am famous.' I told him that he ought to have a show of my work—and he did. I got many shows that way."

Finally, her fortunes changed and her work was published as *Asphalt Gardens.* Also, she was a featured artist at the Atlanta Arts Festival for the International Year of Disabled Persons. Currently, she even has a television program on Manhattan Cable TV. She interviews other photographers and shows their views of the world as captured by their cameras.

Fox carries her autofocus camera at all times, and she attributes much of her success to the technology that enables her to take good quality pictures instantly. Once, she was walking down a city street with a friend. "I heard a crinkling of paper," she recalled, "and asked 'Is this interesting?' My friend replied 'Very,' and I shot the picture. It's called 'Village Family.' Three people and a dog all sit on the steps to a townhouse. The father reads a newspaper; the mother reads "New York" magazine; and their little girl eats an ice cream cone at which the dog looks longingly.

"Photographers once looked down on autofocus cameras. But each of my friends who are professional photographers have bought one. The camera allowed one friend, on assignment in Haiti, to shoot into a crowd of native medicine men and get a picture she would have missed using more traditional equipment.

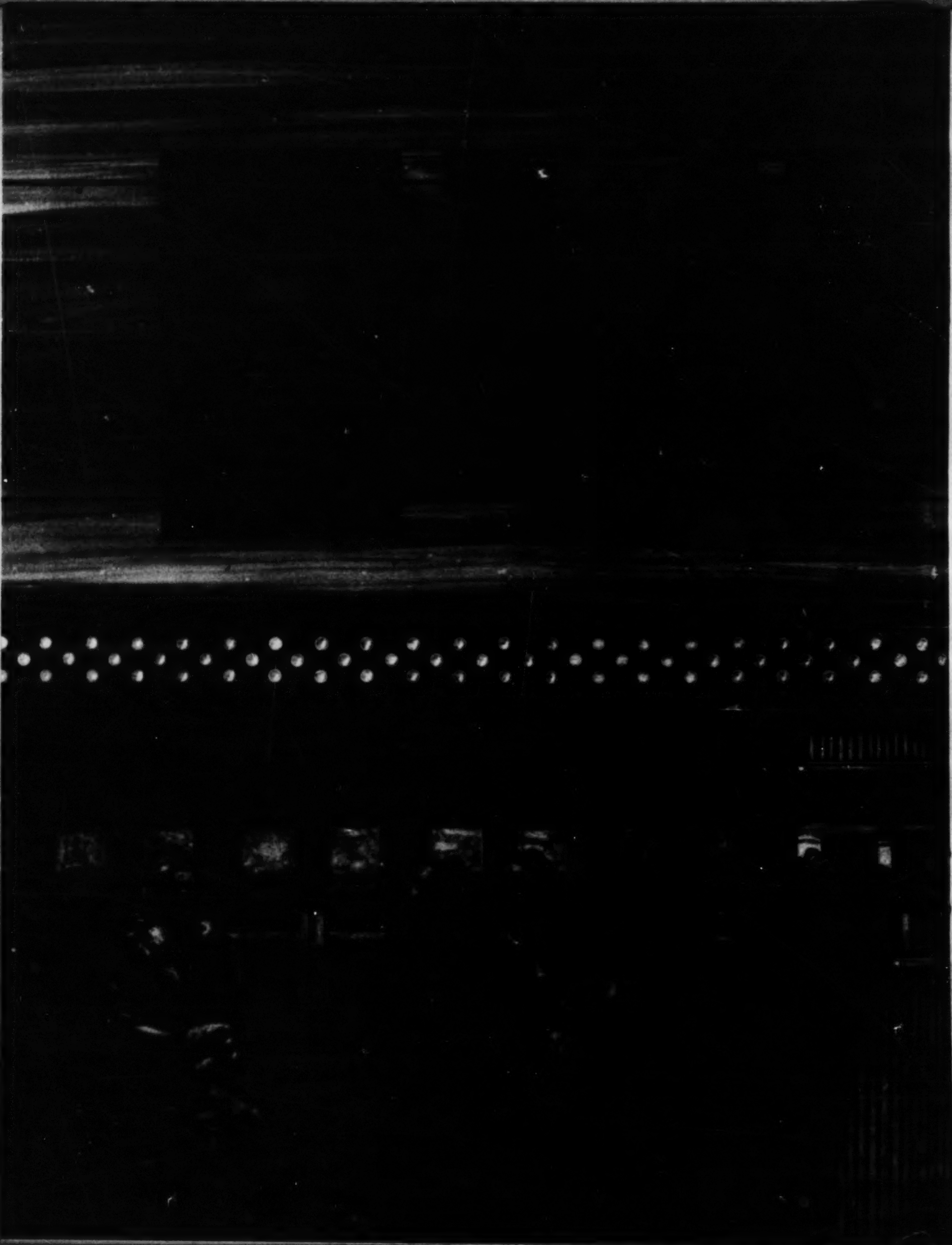
"Ever since *Asphalt Gardens* came out, photographers have been saying 'Wait a minute. You can't see a difference in quality between Fox's pictures and the ones we take.' Some of these people use autofocus equipment now."

Thus, the final irony in Fox's career is how the technology necessary for her to be a professional photographer has enhanced the lives of many able-bodied persons. Fox's camera has demonstrated a new and convenient method of picture taking to other photographers. Her book, made possible by the camera, brings the emotions of urban life to many who have never seen a city, and it brings that life into a clearer focus for many who know it well.

Asphalt Gardens by Flo Fox is published by the National Access Center, 1419 27th Street, NW, Washington DC 20007. $12.98.

—Dale Brown

Ms. Brown is on the Communications staff of the President's Committee.



And Access for All

Theaters Begin Playing to Everyone

"The one noncompetitive pursuit that all of us do together, cheek by jowl, is theater. When disabled people are seen buying tickets, or having a drink during intermission, the public comes to know disabled people as part of society."

Speaking is Larry Molloy, director of the National Access Center. His nonprofit agency gives advice and technical help on accessibility to theaters, museums, and other arts facilities around the country. His commitment to complete accessibility for all handicapped persons stems from his belief that theatergoing is a right as important as the right to transportation or to employment.

Even for persons with severe mobility impairments, Molloy maintains, accessibility is feasible. The appropriate architectural and engineering technologies are well-known. Where costs, at first look, appear prohibitive, clever and imaginative planning can usually render them acceptable. One straightforward example of full accessibility is a new theater built in Miami.

It has neither stairs nor elevators—wide, gently sloping ramps lead to all seating areas. Front entrances, bathrooms, and drinking fountains are designed for able-bodied as well as disabled patrons. Since accessibility features were included in the initial construction, the financial impact of barrier-free design was quite low.

Even with established theaters, Molloy points out, the cost of accessibility need not be high. This is assured if theater owners wisely include barrier removal in plans for theater renovation. Actually this is a relatively rapid way of achieving accessibility throughout the theater industry. Unlike many other public buildings, theaters undergo frequent renovations during their lifespan.

Every theater has a long-range renovation schedule which includes some structural modifications. Funds are always being raised for this. With good technical assistance on barrier-free design, the cost of barrier removal can be subsumed into the expense for periodic renovation. In this way, the cost of accessibility adds just a small amount to the operating budget.

A different kind of renovation took place in Aurora, Illinois, with good results. Efforts to revitalize the downtown area included restoring an ornate theater built in the 1930's. Although the theater's stage remains inaccessible, all areas used by the public are now barrier free. Project architects estimate that accessibility features at the theater added less than one percent to the renovation budget.

Another example of an established theater achieving accessibility is located in Washington, D.C. "For ten years, I carried people in their wheelchairs up these steps." Wayne White, house manager of the Arena Stage is referring to a flight of 11 steps that connect the entrance foyer with the mezzanine.

To overcome this barrier, a ramp was out of the question, due to the small amount of available floorspace and the large change of level. On the other hand, an elevator was too costly.

A more practical alternative was needed. The best solution was to put a porchlift in the lobby and next to the stairs. The District of Columbia building code did not allow installing such a lift in a public place, but a waiver was granted to the Arena Stage. Now, says White, at least one person in a wheelchair attends each performance.

Besides architectural changes that benefit mobility impaired patrons, the Arena has also made changes, for the benefit of visually impaired persons, in how plays are presented. Blind patrons, during peformances, can listen to a trained commentator describe visual aspects of the production. The commentary is broadcast on a restricted radio frequency to people listening on "phonic ears" (a small radio receiver with an earpiece) that are loaned for the performance. A visually impaired person can sit anywhere at the Arena and use the phonic ear effectively.

At the beginning of George Bernard Shaw's "Major Barbara," the commentator made the following remarks about the action on stage: "The mother sits down, her black dress contrasting against the red bench. John walks stiffly over to the chair, flips his coattails up, and sits down, crosses his legs, and fiddles with his tie." When appropriate, the commentator also describes physical gestures, scenery, location of the characters, and their entrances and exits.

Response from consumers has been good. One visually impaired theatergoer, Tracy Reynolds, expresses a common opinion about the informativeness and the conveniences of the commentary. "In the past, I've gone with someone else and they've told me these things. It was nice not having to bother someone and ask them for descriptive comments."

According to Larry Molloy of the National Access Center, theaters around the country are using a variety of techniques for visually impaired patrons. For example, program notes are being brailled or put on tape.

At some theaters, these notes include extra information about sets, scenes, and costumes. At the Alley Theater in Houston, visually impaired patrons have the opportunity for a tour of the stage and an introduction to the actors in costume before the show.

In New York, the Metropolitan Opera provides access to visually impaired persons at no cost to the theater. Says Molloy, "The Library of Congress has brailled the libretti of the operas. And special tapes are also available. A blind woman who was a former opera singer has made descriptive tapes of each opera.

"Contemporary singers have made voice identification tapes, where each singer gives his or her name and sings an aria. The Lighthouse for the Blind did the recordings and Recordings for the Blind the tape duplicating. The cost to Lincoln Center? Zero."

Barrier-free design has a payoff, not only for the disabled theatergoer, who gets to see and hear performances conveniently, but also for theaters. They get new patrons. Said Molloy, "In New York, the Lighthouse for the Blind bought 200 season tickets at the City Opera, which is now accessible to the visually impaired. This was a real plus for the theater, because the Lighthouse bought tickets that never sell. They were for the seats that had the worst sightline or with columns in front of them. But visually impaired persons are primarily interested in voice and expression, and they found these seats fine. Every theater has some seats like these."

In Buffalo, the Philharmonic Orchestra has made efforts to become accessible to hearing impaired persons. The theater where the Orchestra performs asked a local school for the deaf for the loan of phonic ears which students used only during the daytime. During concerts, the music the orchestra produces is "radioed" to patrons wearing the unobtrusive phonic ears. Now the Philharmonic has 250 season subscribers who are hearing impaired.

All of New York's Broadway theaters have some form of audio-amplification for hearing impaired patrons. "This is commercial theater," remarked Molloy. "No federal funds were spent. Why did they pay for it? Because their basic audience is aging and losing some hearing. So the lifeline of Broadway needs audio-amplification."

Some efforts to benefit the hearing impaired do not involve electronics. Some theaters provide deaf persons with scripts to read during the performances. Several theaters have installed small lights in certain seats to facilitate script reading. Also, these seats are located near the stage for the convenience of those who lip read.

Sign interpreted performances are also occurring in some theaters. In Boston, recent theater productions, ranging from Shakespeare's "The Tempest" to contemporary musicals, have included sign interpretation. Sometimes interpreters trained for dramatic work stand on a platform in front of the stage. This puts the interpreters in the same line of sight as the performers on stage. Other times interpreters stand in a small spotlight to one side of the stage.

The Folger Theater in Washington, D.C., places interpreters in front and just below the stage. Deaf persons can view the action on stage and still see the interpreter out of the bottom corner of their eye.

According to Molloy, "The key to achieving accessibility is working with disabled people themselves. The reason that theaters and museums have been so successful is that they went to disabled people first and said 'Help.' The arts want to be accessible. In fact, the National Endowment for the Arts was the second federal agency to promulgate regulations to implement Section 504 of the Rehabilitation Act of 1973.

"I doubt any of the theaters that are already accessible will ever backslide. Disabled people are entrenched as part of their audience. A coalition between disabled people and the arts is being built."

In the past, some disabled people enjoyed live stage enough to overcome or put up with the barriers at theaters. Many other persons have not been willing to accept the inconveniences and inaccessibility. But with time many more disabled people are finding theatergoing easy and rewarding. And their options are still increasing.

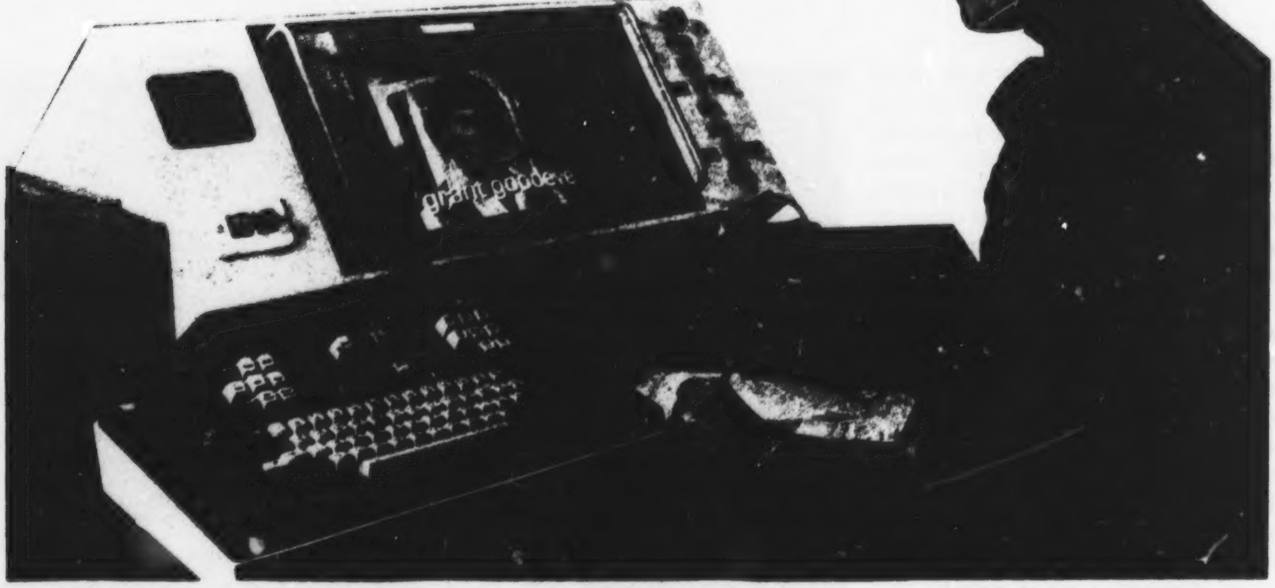
Instead of deciding which theater has the fewest barriers, disabled patrons are concerning themselves with which play to see, which actors to applaud, and what music by which to be thrilled. Being part of more and more audiences, disabled people are cooperating with able-bodied people in one activity in which, up to now, they rarely participate together. For, as many have observed, during a performance, the actors are working, and it is the audience that is "at play."

—Dale Brown

Ms. Brown is on the Communication staff of the President's Committee.

Captioning TV Programs

Competition and Controversy



In 1972 the first captioned "ABC Evening News" appeared on the Public Broadcasting Service (PBS) a few hours after the original airing on the ABC network. Eight years have passed since the deaf community was first able to watch a TV program and fully understand what was being said. Captioning the "Evening News" has continued on a regular basis to the present day, and over 190 stations in the PBS system now air the captioned news every evening.

The amount of captioned programming has increased remarkably since 1972. Other networks besides PBS broadcast captioned programs, and new technologies for captioning have been developed. Yet, contention over how much and in what format to caption has actually grown with the passing of time. Before looking at what this controversy means to deaf persons and to the viewing public in general, the technologies that produce captioned programs deserve some explanation.

The technology used with the "Evening News" on PBS is called "open captioning." The captioned remarks of what is said during the program are included in the television signals that all standard television sets receive and change into picture and sound. All viewers, deaf and hearing alike, see the captions near the bottom of their television screens.

Another technology is called "closed captioning." With this system, a television set must have a special decoder, called a telecaption device, to pick up the captioned remarks that are broadcast not in, but along with the signals for picture and sound. The decoding device then superimposes the captions on the picture of the user's set.

Closed captioning is very new, and the marketing of telecaption devices began just last year. Even though most of the two million profoundly deaf and the five million hard of hearing persons could benefit from closed captioning, only about 50,000 homes in this country have televisions equipped with the decoders. Still, telecaption devices and television sets with the devices factory-installed sell at a rate of 1,000 a month.

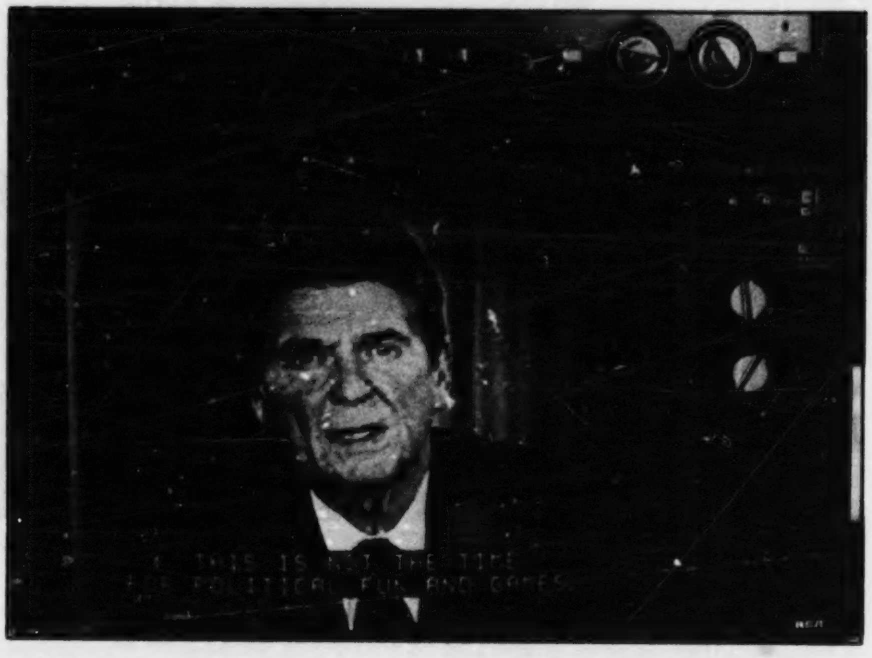
Closed captioning television programs is skilled work performed at the National Captioning Institute (NCI) in Falls Church, Virginia. NCI charges $2,200 for the captioning of a one-hour show. Annually, the broadcast industry spends $1.5 million on captioning, which is the major funding base for NCI. Another source of money is an $8.00 royalty from the sale of each television set that is equipped with a telecaption device.

Now that federal money, another funding source for NCI, is less available, the president of the institute, John Ball, hopes that additional captioning fees and other nongovernment funding will take up the slack. Xerox Corporation, for instance, underwrote the captioning of all President Reagan's speeches last year.

Currently, the National Captioning Institute closed captions about 13 hours of programming each week for three of the four largest networks—ABC, NBC and PBS. Such programs as "Barney Miller," "Love Boat," "Different Strokes," and "Masterpiece Theatre" are just a sample of programs now fully accessible to deaf persons with adapted television sets.

And what about the fourth national network, CBS? It has undertaken the perfecting of a new technology, called Teletexting. This is a communications service for deaf *and* for hearing persons. First, for deaf viewers, this technology features a sophisticated format for closed captioning television programs. Second, it provides deaf and hearing viewers alike with a broad range of consumer information which can be displayed on a television screen at the viewer's discretion.

The CBS technology will not be generally available for several more years. When it is, it will not be compatible with existing closed captioning technology. Therein lies a controversy.


THIS IS NOT THE TIME
FOR POLITICAL FUN AND GAMES.

WHICH FORMAT?

"The CBS Teletext system, as a universally available service, is ten years away," says NCI's John Ball. Moreover, he declares that it may never be available at all. Many deaf persons share his viewpoint and are upset that, in the meantime, CBS refuses to do any captioning.

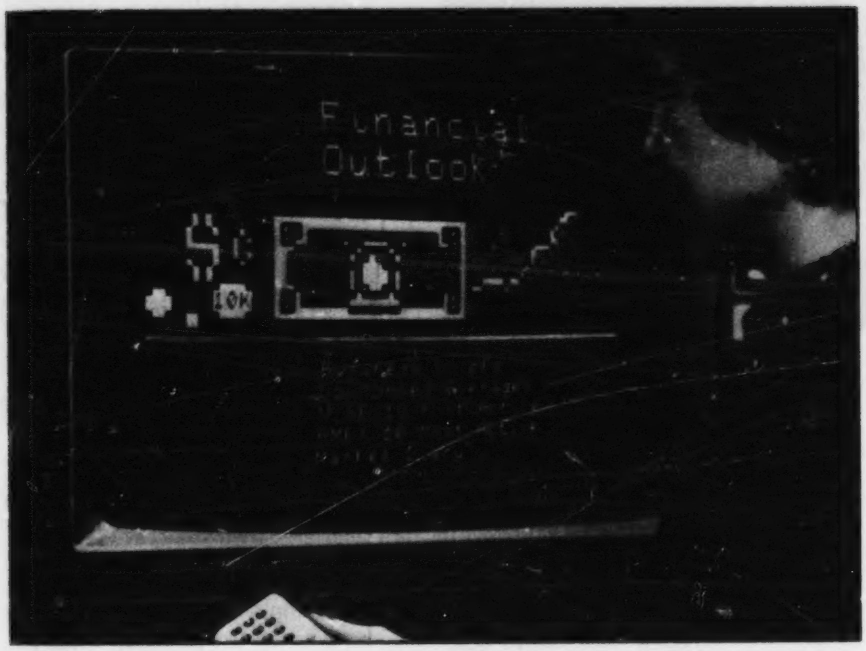
On the other hand, Gene Mater, senior vice president of the CBS Broadcasting Group, maintains that the NCI captioning technology is simply outdated by what CBS will market in the near future. First of all, Teletext allows the deaf viewer to adjust the size of the printed captions and the speed at which they appear on and disappear from the screen. Captions are color coded to each speaker, and the location of the captions changes as the person speaking moves about on the screen. Even if the person talking is off screen, the deaf viewer can comprehend to whom the captioned remarks belong.

Finally, and most importantly, with a handheld calculator-type keypad, a deaf or hearing user of Teletext can have weather reports, news bulletins, and traffic and skiing conditions (to give just a few exemples) displayed on his or her television set.

An Electronic Magazine

CBS calls the part of the Teletext system that provides consumer information "Extravision," and touts it as an electronic magazine that will be constantly updated. Part of the cost of this service will be borne by advertisers funding different sections of the "magazine." For instance, a brokerage firm might sponsor stock exchange reports. Or a commercial airline might sponsor updates of airline departures and arrivals in the local area. A neighborhood store could Teletext current sales. Publishing companies could provide their magazines to television viewers, and the United Press International and the Associated Press could transmit news releases directly into a person's home.

For several years, CBS has been working on a Teletext system, based on technology already in use in Canada and France. Since last summer CBS has been testing their system on a small scale in Los Angeles and San Fran-



cisco. At first, about 30 television sets equipped to handle regular programming and Teletext were placed in public places around Los Angeles, allowing deaf and hearing consumers to experience the features of the CBS system.

More recently, about 75 specially adapted sets were distributed to hearing and deaf persons in Los Angeles and another 25 sets in San Francisco. Each set has a metering device that records which Teletext features the viewer uses and how often. This makes possible the determination of a market potential for each part of the Teletext system, and whether or not the system as a whole can be a commercial success.

Making Teletext generally available hinges upon approval of the system by the Federal Communications Commission (FCC). Such approval helps establish technological standards for the television industry. Once these standards are in place, television set manufacturers will become more inclined to include CBS's Teletext capabilities—rather than telecaption devices—in all the sets they produce.

In Los Angeles, Don Glisson is the manager of the Captioning Center, which is captioning selected CBS programs for the Teletext pilot program. Glisson feels fairly certain that the CBS system will win FCC approval and become the captioning standard for the nation. Notably, the NBC station in Los Angeles is experimenting with Teletext along with the CBS station. Since the entire NBC network is owned by Radio Corporation of America, a major manufacturer of television sets, people involved with Teletext feel that sets with Teletext capabilities will be produced soon after the FCC approves the system.

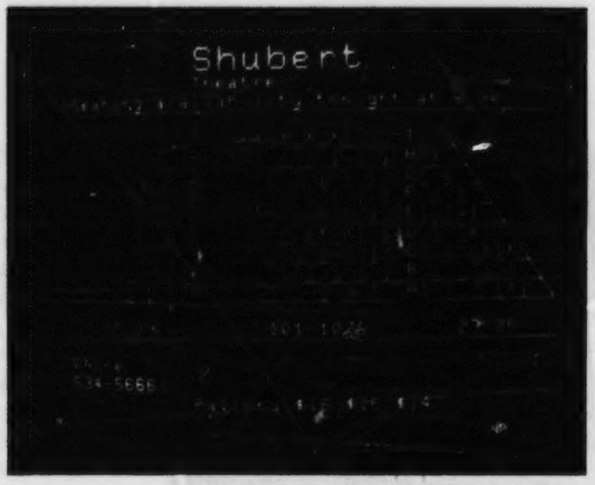
As seen at CBS, the economics of Teletext make it by far the best system to provide captioned programs for deaf persons. Gene Mater points out that the ability to deliver information of general interest increases the market for a closed captioned technology from seven million deaf and hard of hearing persons to the entire American TV market, about 75 million households. With such a large and diverse market, a system that also captions programs for deaf people will be more financially sound and permanent than a system, such as the one using telecaptioning devices, that only captions programs for deaf persons.

But the critics of the CBS system (and the decision not to caption current CBS programs) won't accept the economic argument for Teletext. In the opinion of Jane Miller, the executive director of the National Captioning Institute, "The CBS system is a technology that is looking for a market."

John Ball is not persuaded by the fact that England, France and Canada have generally available systems similar to the CBS Teletext. "Those systems are subsidized by state-owned broadcasting companies. In fact, there has been only recent interest in those countries from the commercial broadcasters." As a consequence, Ball is not confident that Teletext is commercially viable.

The Competition of Cable TV

Critics of CBS's Teletext also say that expansion of cable television will impede the viability of Teletext. By offering a huge array of programs and informa-



tion services, cable television will greatly reduce the potential market CBS expects for Teletext. And if Teletext doesn't have a huge viewership, CBS may not be financially able to cover the costs of captioning programs for deaf viewers.

To this argument, Lynn Grasz, press contact at the CBS Broadcast Group, replies that over ten years time cable television is predicted to penetrate only about 50 percent of American households. At least in the beginning stages, Grasz reasons further, Teletext would be supported by local advertisers. This gives local television stations an important reason to buy and install the necessary equipment to relay captioned material from the network.

Even so, some national advertisers will find Teletext an attractive medium for commercials. At present, the Prudential Insurance Company sponsors a sports information segment on Teletext in the Los Angeles pilot project. Later, Prudential may decide to sponsor this "page" in the electronic magazine on a nationwide basis.

According to Grasz, one indication of the usefulness of Teletext has already been demonstrated in the Los Angeles pilot project. When many air traffic controllers stopped working at the nation's airports, Teletext sets situated in public places had very large audiences. People needed to know when and if planes were arriving and departing, and Teletext supplied them with that information quickly and conveniently.

In the Los Angeles pilot project, the first program captioned in Teletext format was the April re-run of the immensely popular "Who Shot J.R." episode of "Dallas." Other popular CBS programs now captioned in Teletext include all episodes of "M.A.S.H." and "Lou Grant." But of course only very few hearing impaired persons in Los Angeles, and more recently in San Francisco, benefit from the CBS project. The situation is not expected to change soon.

CBS admits that in the period before Teletext becomes generally available to the public, deaf and hard of hearing persons will be denied access to CBS programs. But they excuse this situation because, ultimately, CBS will extensively serve the information needs of the general public and provide hearing impaired persons with better captioning than presently available.

Opinions of Deaf Viewers

The deaf community, however, is unhappy with what CBS is doing. In fact, the basic advantages claimed for Teletext—the technologically advanced captioning, and the broad market appeal—are contested by deaf persons. One voice is Tracy Harris's. She coordinates public policy studies at Gallaudet College.

"CBS's system is not inherently better for the hearing impaired," Harris claims bluntly. "What is frightening is to think that the hearing impaired community, in its long quest for access to broadcast television, would turn to a system providing primarily print information as an alternative to captioned broadcasting by a major network. And simply because of a better publicity effort."

Moreover, Harris continues, CBS could make Teletext compatible with existing telecaption devices, but doesn't in order to force people to use only Teletext. Harris has made her case against Teletext public with a lengthy article in the November issue of an educational newspaper called "Counterpoint." In rebuttal, CBS's Gene Mater will have a column in the same publication this coming May.

HOW MUCH TO CAPTION?

Another controversy with captioned television programs concerns how much captioning should, or must, be done. On one hand, some deaf consumers complain that the number of hours, currently 45 to 50 each week, that the major networks air captioned programs is too few. On the other side, broadcasters complain that greatly increasing the amount of closed captioning is too expensive for the small number of deaf viewers with adapted television sets.

In Los Angeles, the Greater Los Angeles Council on Deafness has been pursuing legal measures to force more captioning by local television stations, preferably open captioning. Because station KCET (a Public Broadcasting Service affiliate) receives federal funding and the other six major commercial stations utilize the public airwaves, the Council on Deafness has urged the FCC to deny license renewal to any station that fails to caption all its programming.

After the FCC denied this argument, the Council went to federal court. The court upheld the FCC decision, but also directed the Commission to set up guidelines by which KCET should serve the handicapped community. Feeling that such guidelines overstep the purpose of the Commission, KCET has sued to dismiss the court's decision.

As far as KCET is concerned, says Charles Impaglia, manager of publications and promotions, the station is already doing a remarkable job making its programs accessible to deaf persons. About 30 percent of KCET's programs are either captioned or sign interpreted. "That is the same if not more than what any other station is doing in the country today. We are doing the best we can. Funds are scarce; we can't afford to caption everything."

Major Court Decision

The Council on Deafness has not rested its cause and continues legal action on behalf of more captioning. Another favorable decision occurred last November. A Los Angeles judge ruled that federal agencies could not support public broadcasting stations until they captioned all programming in the "open" format. The judge specifically ruled out closed captioning because that format requires deaf persons to purchase a decoder. Equality of access, the judge commented, should not have to be purchased.

Court action on this matter will probably continue for some time. This is especially so since the recent court decision ensnarls the controversy about how much to caption with a new dimension of the format controversy: The extensive use of open captioning versus the annoyance it may cause the hearing public.

Adding to the confusion is the fact that within the deaf community, support for the Los Angeles Council on Deafness's position is not uniformly enthusiastic. The president of the National Association of the Deaf, Al Pimentel, feels that both open and closed technologies should be utilized since neither is without a serious drawback. Extensive open captioning annoys the hearing public; closed captioning requires deaf persons to buy extra television equipment.

At Gallaudet College, Tracy Harris fears a backlash from the hearing community if open captioning is done extensively. Also, she finds the decision to force captioning of all public broadcasting programs regrettable. So much federal support money, she believes, will have to go to pay for this, little will remain to help the National Captioning Institute caption commercial programs, which is not required by law.

How much to caption and in what format are difficult issues. Difficult also will be determining the results of the decisions that are finally made. If the FCC decides to adopt an industry-wide standard for closed captioning, it appears that CBS's Teletext will be the one. But only much later will the industry and the deaf community discover how viable Teletext can be.

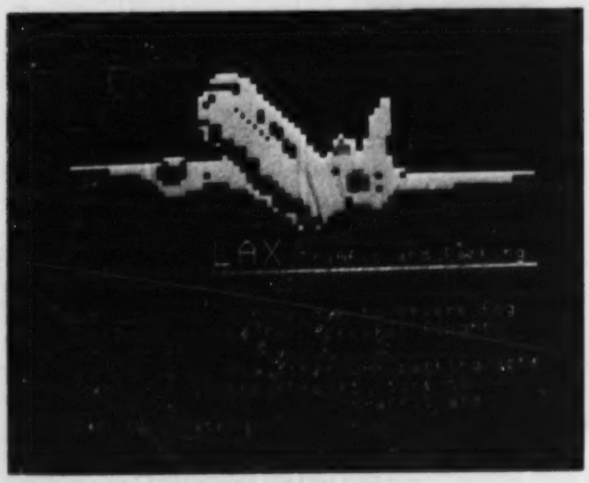
At the same time, legal actions based on civil rights of deaf persons to have access to television programs will continue. Within the current climate favoring deregulation of American business, one must wonder about the ultimate success of these court suits. Still, the history of broadcasting is filled with key decisions that changed the course of the industry in America. Among these are instances of important controversies settled in the most unpredictable manner.

In the history of broadcasting, never before has the disabled community been so involved with decisions on technology and policy. The active participation of deaf persons in forming these decisions and the industry concern for the needs of the deaf community make these decisions involve substantial amounts of money and the attention of the industry's top executives. Ultimately, even the viewing habits of the general public may be affected.

—Larry Chase

Mr. Chase is a free-lance writer.

Editor's Note: As this issue was being printed, an important change occurred with captioned television programs. The National Broadcasting Company (NBC) announced it would, on March 15, discontinue making any NBC programs accessible to deaf persons whose television sets were equipped with telecaption devices. NBC will continue to participate in the testing of the Teletext system. In explaining its decision, NBC stated an expectation that new technologies will fill the gap caused by ceasing to closed caption NBC programs.



CQ Calling

Handicapped People On Short Wave Radio

For most of us, our sense of community focuses on the people who live nearby. In one community, proximity is beside the point. Members routinely talk to each other, and feel very comfortable, even though hundreds of miles separate them. Perhaps they have never even met in person. This community is the 500,000 ham radio operators in the United States. Fifteen percent of these operators have physical impairments; but in the world of ham radio, disability is no handicap.

"I was a voice, a personality, a mind," said Meg Cauffield, a ham operator with almost 30 years of radio experience. She has osteogenesis imperfecta (a condition in which the bones fracture easily) and uses a wheelchair. "Radio let me be on the same level as other people. It had nothing to do with physical attributes. It let me meet people on a more equal basis."

During her young adult years, Cauffield was homebound and lived with her parents in a small town in Pennsylvania. "I didn't have very much activity," she remembered. "I sewed and read. In a small store downstairs, my parents worked from morning until the evening. I was lonely after my brother and sister went to college. I don't remember being bored, but I needed something."

When Cauffield was 31, a minister visited her and suggested that she study ham radio. He was familiar with ham radio and the diverse and enriching community of ham operators.

"He encouraged me to learn radio theory and morse code," Cauffield explained. "It was such a joy and a pleasure. I was doing something and working towards a specific goal. I hadn't done that before. I learned the code, and within six months, I had an amateur license." After gaining radio experience with morse code, Cauffield earned an additional license. This one allowed her to broadcast in voice, the form of radio communication preferred by most hams.

To meet other hams on the air, Cauffield would select a radio frequency and, either in morse code or in voice, broadcast her call letters, KFOL. Then she

would transmit a code term "QFZ," to announce her intention of using that frequency, and another code term "CQ calling," to show her interest in talking with whomever might be on the same frequency.

For Cauffield, her association with radio was an enjoyment. It also brought important changes to her life. Among the acquaintances she made among ham operators, several were from Washington, D.C. Because of the friendship which matured over the air waves, these friends assisted Cauffield to come and see them. It was her first time away from her family home.

Not only did ham radio help end Cauffield's social isolation, it improved how others viewed her. In fact, it literally opened doors to a different life. Cauffield's contacts with rehabilitation professionals had always been brief and inconclusive. Given the extent of Cauffield's disability, no one thought she had employment potential.

"But when a counselor from the State Bureau of Rehabilitation visited me at home, her picture of me changed. She found out that I had a license and had intelligence and talent. She wrote up a rehabilitation plan and submitted it to her supervisors, who couldn't believe what she had said about my employment potential. Several of them actually visited me in order to see for themselves. Eventually, my counselor's plan was approved, and I began a business school program at a rehabilitation center."

Through personal contacts that Cauffield made in the business program, she obtained a secretarial job in a federal agency. Taking the job required that Cauffield relocate to a new city and establish her own home. Once again, her involvement with ham radio paid a critical dividend. Members of the Amateur Radio League supported Cauffield's career aspirations and helped her find an accessible apartment in her new hometown.

Cauffield has continued working since that time, and she has maintained an active participation in the community of ham radio operators.

Another disabled operator who knows how ham radio helps create lasting friendships is Ann Warren. "Most of my friends are hams. I meet them by chance on the air waves. For instance, one day I set my receiver to a certain radio frequency and heard two people talking to each other. I joined in that day, and ever since then, I have talked to them twice a day for fifteen years."

Periodically, said Warren, radio operators from distance locations hold conventions, within the radio community known as "hamfests." In a festive environment people meet in person, often for the first time, other operators with whom they may have shared years of friendship over the airwaves. "People usually wear pins proclaiming their radio call letters. You usually go looking for that rather than for faces, because that's all you know about other operators. Meeting people that way can be very interesting."

Can deaf persons be hams? Definitely.

In our well-ordered society, it often seems that once something is enjoyed by a dozen or so people, an organization forms to promote it to others. Just so with disabled ham operators. No longer must a disabled person learn ham radio from able-bodied operators and adapt to their practices and equipment. Instead, there are organizations that introduce ham radio to interested disabled persons and support the activities of those already broadcasting.

One such group is HANDIHAM, a network of disabled ham operators that encourages involvement in amateur radio. Operating out of Courage Center, a rehabilitation program in Minnesota, HANDIHAM has 2,600 members in all 50 States and 22 foreign countries. One staff member at HANDIHAM is Maureen Pranghofer, who has been broadcasting for ten years. According to her, HANDIHAM helps disabled persons study for their radio licenses by holding intensive, week-long seminars, by matching students with experienced radio operators who act as their men-tors, and by providing taped textbooks for print handicapped persons.

Another service involves equipment. The organization loans radio equipment to handicapped operators as well as develops adaptive devices for disabled hams. Most of these special devices are electronically simple, and they allow persons with many types of severe disabilities to participate in the community of ham radio.

For instance, some quadriplegics can use a mouth piece to send morse code. Instead of pressing a code key with a hand, these persons puff or sip on a small tube to create the electronic dots and dashes of morse code.

Can deaf persons be hams? Definitely. All that is needed to communicate on radio using morse code is a "tactile board." In this device, an oscillator receives incoming radio signals and causes a speakercone to vibrate. Since the speakercone vibrates differently when a "dot" or a "dash" signal is received, a deaf operator can follow a message simply by touching the speakercone.

Some disabilities need individualized adaptive equipment. HANDIHAM can help here, too. One person with cerebral palsy lacked the stability in her arms to operate a morse code key. Pranghofer said her agency built this person a wheelchair lapboard on which velcro straps secure the person's wrist enough for her to transmit code efficiently. Some disabled hams send morse code by operating the code key devices with their toes or even their noses. "The only thing we don't have," she remarked, "is a device with which to send code by eyeblinks."

Nevertheless, HANDIHAM has done some unusually sophisticated adaptations. For a man with "universal allergy," HANDIHAM built a station within a stainless steel ball. The man is allergic to so many common materials that he lives in a sterile bubble and operates his radio station with a remote control switch.

A blind ham operator, Chris Ramsay, has a variable pitch device with which he tunes his frequency selector with precision. Ramsay also has a typewriter that transmits morse code as he types the letters on the keyboard.

"I enjoy talking to people and have started many friendships on the air," Ramsay commented. "But right now, I don't do very much informal talking. I'm more involved with 'traffic nets,' a nationwide chain of ham operators that helps people send messages across the country.

"Let's say I had a message to get to California. I would communicate the message to someone in my State traffic net. Then he or she would pass it along to the regional net, which transmits it to the California State net. An operator in the locale of the message's destination would then deliver it by a local phone call. Usually this process takes about a day."

Ramsay often serves as a traffic coordinator for the hams in his region. "Stations get on the air at a certain time. Some have messages to send; others stand by to receive messages. On the air I announce the beginning of the traffic net meeting, and coordinate which operators get together at what frequencies to exchange messages. For example, I will ask everyone with messages going out of State to 'meet,' on a specified frequency, with the person who handles such messages.

"Traffic nets also function as an emergency communications system in

case of a major disaster. We just had an exercise simulating a crash of a large jetliner. I coordinated ham radio communications between the crash site and Red Cross headquarters. Not long ago, there was a flood in my State. I and other ham operators helped put victims in contact with their relatives."

During the revolutionary turmoil in Iran two years ago, ham operators often linked Americans in Iran with their families and colleagues in this country. One such operator was Bill Shepherd, who uses a wheelchair. After the fall of the Shah of Iran, normal means of international communications were difficult and unpredictable. But with his radio equipment, Shepherd received numerous messages from business persons in Iran who wanted to reach their home companies for instructions.

But it doesn't take an international crisis for Shepherd to be called upon for aid. Emergency situations in which his assistance can be important occur in the locale where he lives and works. While driving his automobile one day, Shepherd was stopped by a policeman whose own radio had malfunctioned and who needed to call an ambulance.

Because the policeman noticed ham radio call letters on Shepherd's license plate, he asked Shepherd to use his ham radio and summon the needed emergency assistance.

Normal activity for ham operators, however, is rarely punctuated by such crises. Still, communicating over vast distances and making friendships with total strangers is exciting. Some operators, like Shepherd, put in a lot of time assembling equipment that allows them to reach foreign countries. His equipment is specialized. Using only one or two watts of power, "about the amount used for a flashlight," Shepherd has talked with hundreds of ham operators all over the world.

They don't distinguish people as able-bodied or disabled. You're not an exception.

"It's a great hobby," he commented, "and it can lead to employment opportunities and a chance to become more well versed in foreign languages.

"And it's one of the few situations where your peers may not know about your disability and probably not care if they did. They're interested in you as a ham operator with an intellect, ideas and personality. They don't distinguish people as able-bodied or disabled. You're not an exception and you're not different.

"Even so, able-bodied hams respond quickly to the needs of disabled hams. A disabled ham who needs help putting up an antenna gets it from his or her fellow operators. The radio club to which I belong even changed it's meeting place to accommodate my wheelchair—and to attract other disabled hams as members."

Ham radio helps people transcend more than geographic barriers. Through talking on the air, able-bodied and disabled persons work together and overcome attitudinal barriers that sometimes divide them in other walks of life.

—Dale Brown

Ms. Brown is on the Communications staff of the President's Committee.

RSVP

Volume 4, Number 6

In reading comments from your readers, I was most interested in the comment by Lorraine Schimmels, Caldwell, Idaho, which illustrates, more concisely and more clearly than anything I've seen to date, the close-minded attitudes that are the disabled person's most difficult barrier to a decent and full life.

How self-righteous and superior to be able, by a few chosen and limited examples, to eliminate and invalidate the millions of true and unmet needs expressed by so many disabled people. The ignorance of her statements is unbelievable.

Maureen Duffy
Medford, NY

Volume 4, Number 8

I am most impressed with your recent focusing on "Double Disability . . . Handicapped Persons from Minority Groups." In our graduate special education program, we are attempting to improve our presentation of minority matters and cultural diversity as they apply to people who are disabled.

I am interested in obtaining additional copies so that each of the key faculty involved may have a copy. If at all possible, I would be interested in another 30-80 copies so that we may add them to our library and require students to read them each semester.

Adele Schwartz
Hunter College
New York, NY

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It is with great pleasure I congratulate you on your fine article, "Minority Voices: Neither Part of a Double Disability is the Whole Person." Your article illustrates that disabled persons come from all ethnic and religious backgrounds, and you point out that those persons who have physical or mental impairments, in addition to an ethnic minority background, are viewed by society as victims of a "double disability." Too often, the emphasis in literature and research on disability is placed on the white males who have been "mainstreamed" into society; this imbalance has been redressed by your outstanding article.

Chester P. Avery
U.S. Department of Education
Washington, DC

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As a physician who has worked with leprosy (or Hansen's Disease) for the past 22 years, I was pleased to find an article on this disease, which ostracizes over 12 million of the world's population. The title of the article, "It's Not Contagious: And the Name Is Hansen's Disease, Not Leprosy," is, however, incorrect. Leprosy is contagious, though not nearly so contagious as other diseases.

Sadly, the fear of the disease is highly contagious. Also, rather than "The Name Is Hansen's Disease, Not Leprosy" you might have accurately said: The Name Is Hansen's Disease *and* Leprosy. The use of the term "leprosy" has many vociferous antagonists, but most of the medical world views leprosy as an acceptable term. But all agree that the term leper is a stigmatizing reference to the patient and is unacceptable.

S. C. Topple, M.D.
Charlotte, NC

Volume 4, Number 9-10

I feel compelled to express my pleasure at receiving this interesting and I suspect controversial issue. Given today's political and economic climate, we are seeing a re-emphasis on employment as the primary goal of publicly financed rehabilitation services, and this series of articles is a good focus for both disabled persons and rehabilitation professionals. As a vocational counselor who helps severely disabled persons prepare for return to an economically productive life, I would like to use this issue for participants in our vocational assessment and decision-making program. Adding this series of articles could be an important contribution to our discussions.

Peggy Kanellos
Institute for Rehabilitation
and Research
Houston, TX

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I can't put into words my deepfelt appreciation for you and your staff for publishing my article, "No Bed Of Roses," on working conditions in several sheltered workshops. Thank you for using my article to enable thousands of visually handicapped people achieve a decent living as a God-given right.

Thank you for a job well done, and I hope that this will lead to something better for me and others. By the way, if any interested persons would like to get in touch with me, please have them write me.

David Shapiro
Box 135, Hotel Griffin
Griffin, GA

Of particular interest to me were the articles written by Tony Suazo and David Shapiro, discussing employment of blind workers in sheltered workshops. Mr. Suazo very appropriately recognizes the value of these work environments, as well as the difficulties inherent in running nonprofit organizations which must serve as both employment training facilities and production outlets.

Mr. Shapiro, on the other hand, provides a personal outlook on sheltered workshops—which has its merits if it does not delve into generalities. His opening sentence, "Many visually handicapped workers employed in sheltered workshops are overworked and underpaid and labor in substandard working conditions," sets the tone for the article and is followed by several other unfounded generalities, damaging to those industries for the blind that offer competitive wages, good working conditions and opportunities for advancement.

Catherine Raphel-Wetzel
Director-Public Relations
National Industries for the Blind
Bloomfield, NJ

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"No Bed of Roses—An Inside Look at Sheltered Work" by Mr. David Shapiro apparently was accepted at face value without being verified for accuracy or truth by the editor. We, too, had received Mr. Shapiro's manuscript and declined publishing it in our newsletter because we knew most of the information was not based on facts, but rather on the writer's limited personal experience. The President's Committee on Employment of the Handicapped and Department of Labor's implied assistance in allowing publication of statements and views from one individual that visually handicapped workers are overworked, underpaid, and labor in substandard prison-like conditions is both surprising and unwarranted.

Articles such as these are generally misunderstood by the reader and are most damaging to the majority of workshops for the blind that pay competitive wages and fringe benefits, provide good working conditions, and offer opportunities for advancement.

Your official statement that "Disabled USA" reports progress in opportunities for all handicapped workers and provides all readers with general information concerning developments in rehabilitation and placement of people with disabilities does not run true to form considering this article that was allowed to be printed. Perhaps the editing process used by "Disabled USA" in covering the workshop programs in this country needs to be reformed.

George J. Mertz
Executive Vice President
National Industries for the Blind
Bloomfield, NJ

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"No Bed of Roses" is an absolute exception to the type of objectivity that previously has been representative of your magazine. By implication, you are indicting not only the workshops that are referenced in the article but all other workshops. We've seen this type of yellow journalism in the "Wall Street Journal," on the CBS "60 Minutes" program, and in other areas lately. I would think that a magazine of the stature of "Disabled USA" would try to set some standards for objectivity and fairness in its articles that other magazines could look to. Certainly, your magazine is an "inside" magazine that should have access to more accurate information than some of these other journalistic efforts.

In many instances sheltered workshops in our country today are fighting almost insurmountable battles just for survival. Recognizing that there are and have been abuses in some isolated areas, it is unfair to indict by implication all sheltered workshops, and thereby intensify the difficulty of keeping together programs that are in many instances vital to the blind, multiply handicapped, and otherwise handicapped individuals that are served.

William M. Winkley
Executive Director
El Paso Lighthouse for the Blind
El Paso, TX

◆◆◆

I have just finished reading from "cover to cover" your fine magazine. I must compliment you on the wide range of information you offer. I would like to subscribe to your magazine as I feel it will help me to become a better workshop supervisor by enabling me to be more sensitive to the needs of my clients.

Deborah Polk-Axelby
Central Connecticut Association
for Retarded Citizens, Inc.
New Britain, CT

◆◆◆

I am impressed by the content and information in the latest issue.

Alice Nagle
Moss Rehabilitation Hospital
Philadelphia, PA

◆◆◆

My compliments on your most recent issue concerning employment! I am hearing lots of favorable comments about it from other people as well.

Karla M. Lortz
Governor's Committee on
Employment of the Handicapped
Columbus, OH

◆◆◆

I read your latest issue with special interest. I tried for four years to return to work but was sadly disappointed when my company advised me that they were unable to rehire me. The publication of this most recent issue has therefore prompted me to ask if your good office would kindly forward them one or more copies, which would, I am sure, alert them to the difficulties, desires and capabilities of most disabled people.

John C. Howfelt
Carlsbad, CA

MAY WE SERVE YOU? . . .

. . . Interested in a kayak trip in a southeastern State, a bike trip from the United States to Canada, canoeing and horsepacking in the Rocky Mountains? These are some of the summer programs planned by the Vinland National Center and open to all disabled persons. Costs of programs vary, but participants are asked to pay room, board and travel. Scholarships may be available. Contact Vinland National Center, 3675 Ihduhapi Road, PO Box 308, Loretto, MN 55357. The center also publishes, at a cost of $5.00 each, health-sports and recreation training manuals on pulk and nordic skiing, kayaking, relaxation, promoting health, fitness, and an introduction to adventure.

. . . If you are print handicapped—unable to read print materials because of a visual or physical disability—the National Public Radio system can help you access indepth coverage of news and current events. The Service for the Print Handicapped produces hundreds of hours of programming, available to member stations of National Public Radio, specifically designed for visually and physically impaired listeners. These programs include a weekly news magazine, readings from leading national newspapers and from science publications, and special reports on disability issues. For more information, contact your local member of the Public Radio network, or Service for the Print Handicapped at National Public Radio, 2025 M Street N.W., Washington, D.C. 20036.

IN SUPPORT OF LIFE . . . A "Tactile Communicator" is a radio paging system developed to alert deaf-blind persons to such "lifeline" information as smoke or fire alarm, telephone calls, doorbells, the crying of a baby, or an oven thermometer. A small transmitter receives electronic impulses from various parts of a person's home that is "wired" for lifeline information, and then transmits radio signals to a vibrating receiver, worn by the deaf-blind person. Different patterns of vibrations identify the origin of a radio signal. Also, the transmitter can be adapted to transmit morse code to the person wearing the receiver. The Tactile Communicator costs $300 and can be ordered from Herb Cohen, Research Department, Helen Keller National Center, 111 Middle Neck Road, Sands Point, NY 11050. (516) 944-8900.

FOR THE PARTIALLY SIGHTED . . .

. . . Pick a card—any card. There are now playing cards designed for visually impaired persons to enjoy alone or with other persons, sighted or not. A blind consumer with five percent vision developed the specially printed cards. Black and red colors were retained for the Spade and Heart suits; green and blue were selected for Diamonds and Clubs. Each card has the standard symbols in the diagonal corners, but the body of each card has a number or letter printed two inches tall. "LoVision" cards cost $7.50 for a twin deck. For sample cards and ordering, contact The CIDCO Co., 6570 Devenwood Drive, Cincinnati, OH 45224.

. . . Two portable electronic reading aids are now available. Sensory Corp., at 205 W. Grand Ave., Suite 110, Bensenville, IL 60106, markets "Viewscan," a nine - and one - half - pound device that electronically magnifies an image up to 64 times original size. The VisualTek Corp., at 1610 26th St., Santa Monica, CA 90404, markets "Voyager XL." It weighs 17 pounds and magnifies an image up to 60 times original size.

APRIL

FOR YOUR CALENDAR ...

... Disabled residents of southern States can receive three days of free training in their rights under Section 504 of the 1973 Rehabilitation Act. Write Disability Rights Training Workshops, 504 Training Logistics and Participant Coordinator, PO Box 31463, Raleigh, NC 27622. (800) 334-9276.

... On April 15-17 at the Los Angeles Convention Center, the California Association of the Physically Handicapped will sponsor the fourth annual International Abilities Unlimited Exposition. Over 200 booths will display products and services from around the world for disabled people. Also, the Exposition will feature a job fair with up to 110 employers, various seminars for disabled consumers and service providers, and a number of special entertainment and recreation events. For more information, contact IAUE, 2945 Harding Street, Suite 107, Carlsbad, CA 92008. (714) 434-6004 or 729-0853.

... On April 22-24 in Dallas, the Spina Bifida Association of America holds its 9th Annual Conference. The conference features a medical update on the care, treatment and rehabilitation of persons with spina bifida, a research symposium, and other workshops and seminars. The address of the Association is PO Box 200, Garland, TX 75040.

... On April 25-30 at Gallaudet College in Washington, D.C., the President's Committee on Employment of the Handicapped hosts an international conference "Disability and Communications: A Global Perspective." The conference will explore the communications needs of disabled people in both developing and developed nations.

... April 28-30, the President's Committee holds its Annual Meeting at the Washington Hilton. At this printing Senator John East, newscaster Paul Harvey, and football coach Lou Holtz are confirmed banquet speakers. The Annual Meeting program includes an exhibit hall, discussion groups "spotlighting" important current issues, and entertainment.

PUBLICATIONS ...

... "Personal Computers for the Physically Handicapped" shows how disabled persons use computing equipment and computer programs for personal needs. The 10-page booklet includes examples of persons who have mobility, developmental, speech, and hearing impairments. With relatively simple and easy to control equipment, these people operate home appliances, answer the telephone, play electronic games, type letters, produce speech, and undertake educational courses. Order from Apple Computer, Inc., 10260 Bandly Drive, Cupertino, CA 95014.(408) 996-1010.

For more information about personal computers for disabled persons and a catalog of programs developed for the handicapped, write Prentke Romich Company, R.D. 2, Box 191, Shreve, OH 44676.

... "Telecommunications and Developmentally Disabled People" describes use of telecommunications media by developmentally disabled persons as well as groups that work with them. Of the variety of telecommunications media used by more than a dozen groups in Vermont and at specialized developmental disability centers nationwide, telephone conferencing, personal computers, and electronic mail proved the most successful. Order from Institute for the Future, 2740 Sand Hill Road, Menlo Park, CA 94025. The cost is $15.00, and individuals, students, or members of nonprofit associations are eligible for a one-third discount.

Harold Russell

THE PRESIDENT'S COMMITTEE
ON EMPLOYMENT OF
THE HANDICAPPED
WASHINGTON, D.C. 20210

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SUMMER 1982

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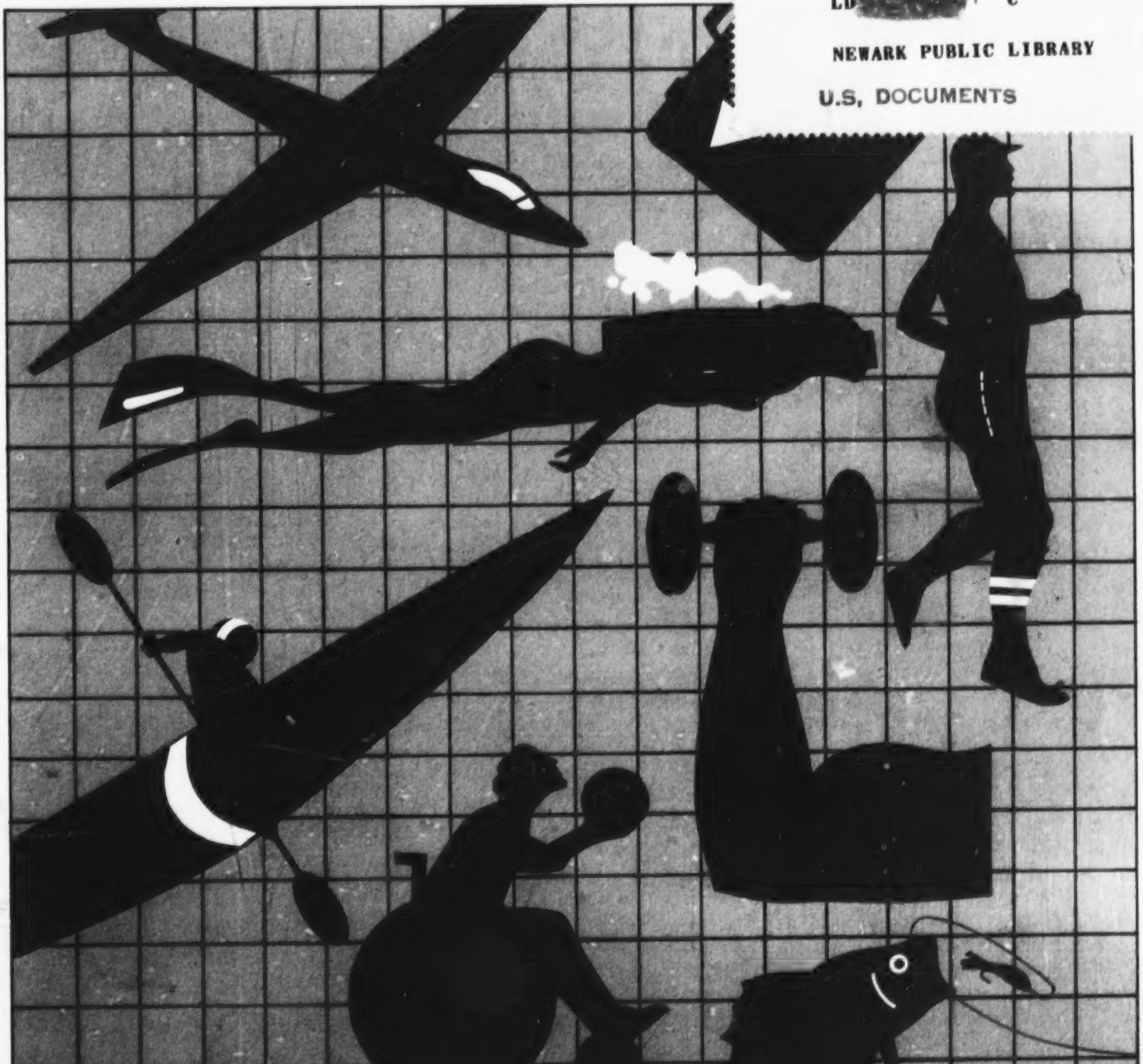

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DISABLEDUSA

SUMMER 1982

To most everyone, travel and recreation are important; both enrich a life, and recreation enhances health. Where thoughtful accommodations and an accepting attitude toward disability exist, opportunities for travel and recreation for all disabled people are possible. This issue features stories about disabled people who know adventure and also the satisfaction of being physically active.

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CHAIRMAN'S COLUMN

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DISABLED USA reports progress in opportunities for all handicapped workers, keeps Governors' and Community Committees informed of new ideas and activities, and provides all readers with general information concerning developments in rehabilitation and placement of people with disabilities. In a phrase, Disabled USA presents the case for disabled adults.

The Chairman of the President's Committee on Employment of the Handicapped has determined that the publication of this periodical is necessary in the transaction of the public business required by law of this Agency. Use of funds for printing this periodical has been approved by the Director of the Office of Management and Budget through August 15, 1981.

DISABLED USA encourages the submission of articles for publication by all readers, especially disabled people. Articles should be eight to ten, typewritten, doubled-spaced pages, written in an informal style. We also welcome letters from readers for the RSVP column. (All articles appearing in DISABLED USA may be reprinted with or without credit.)

Adventuring

Buddahs, Airlines and Asian Exactitude

The International Express, called the Golden Arrow in Malaysia, was moving 35 or 40 miles an hour. The sweet, tropical air felt warm and humid as it passed through the purple curtains, into the wood-paneled compartment, and around me. It was delicious.

Ever since my youth, I have dreamed of travel to exotic and faraway lands. Perhaps I wanted to find another culture more understanding about my disability—but I also had a passionate desire for the adventureous and romantic. Anyway, since those early days, I have managed to log tens of thousands of miles by air and land to some of the most interesting and exciting locations on earth, including the South Pacific, Western Europe, and the Mediterranean.

On this trip I was in Southeast Asia. I spent three weeks in Singapore and then traveled north to Thailand on the Golden Arrow train. Approaching the Malay-Thai border, the train slid past an elegant Confucian temple aglow with illumination from hundreds of candles. It was a restful, peaceful scene. Such scenes are the most enduring "baggage" I bring home.

The Thai customs officials were most friendly and helpful, especially to me and the other Americans on the train. In my travels I have found that Americans are universally liked, and this continued to be true throughout East Asia. It seems many Asians met us during the Vietnam War Era and were impressed. Now that many fewer Americans visit Singapore, Malaysia, and Thailand, the people there really seem to miss us Yanks.

As the Golden Arrow entered Thailand and picked up speed again, it passed a beautiful golden mosque, several Buddahs, and spirit houses. East Asians are very spiritual. According to them, spirits are everywhere and must be taken into account when making almost any decision, business or personal. In Kuala Lumpur, Singapore, or Bangkok one can see, in front of every modern highrise, an air-conditioned and lighted spirit house, many with precious jewels costing over one hundred thousand dollars. These structures resemble very elaborate doll houses and are for spirits to live in.

As I pushed and shoved my wheelchair down the narrow aisle of the small-gauge railroad and headed to the dining car, I spotted three Californians. They were on their way back from rock climbing in Nepal. I also met a couple of German bakers on their way to new jobs and several Thai journalists. Before long we were all having a long Thai party—with the Thai journalists insisting on paying for every morsel and drop of excellent Thai food and whiskey.

Three weeks earlier I had arrived in Singapore, coming to East Asia as a delegate to the First Congress of Disabled Peoples' International and as transportation coordinator for the United States delegation. My stay in Singapore had been a very busy time. Since I was the only delegate who also worked in the entertainment industry, the local media scheduled many interviews with me. Along with this went daily trips downtown to Pan American Airlines so that I could arrange further travel for the American delegates and delegates from other countries.

For instance, half a dozen African delegates were anxious to fly to the U.S. on their way home and experience a bit of our country. They had a positive attitude toward America and spoke admiringly of our nation's attitudes towards Blacks. I was proud to help them, but at the same time it was hard to hide my laughter when they wondered if Pan Am would serve only hamburgers and hot dogs, and if any of the stewards would be the bare-chested macho cowboys so often portrayed in jeans advertisements. I was sad to tell them Pan Am might not measure up to their expectations, but I was able to make good accomodations for them.

There is always so much good and bad about the world—and so it was in Singapore and the Disabled Peoples' Congress. Getting the American delegates there had been a challenge.

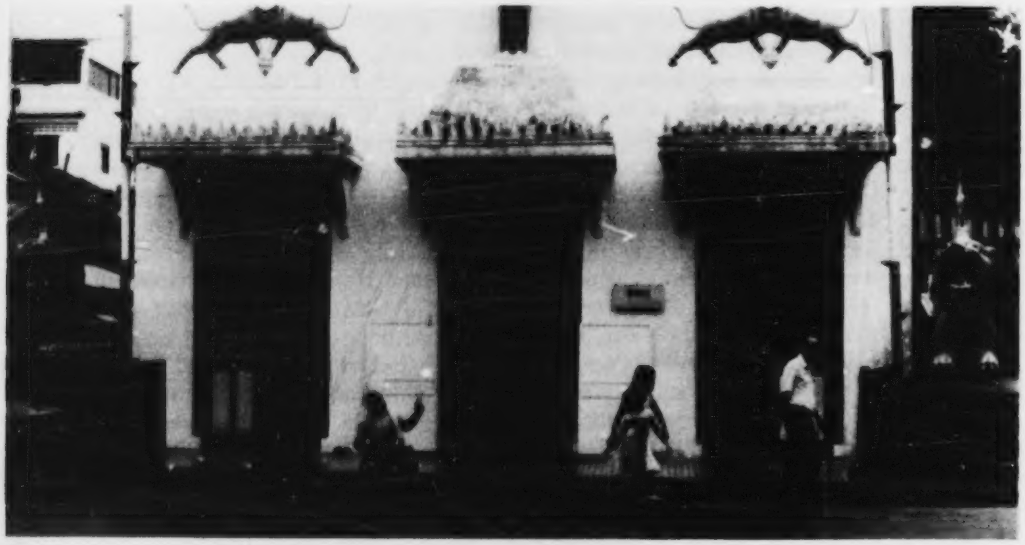
Originally, Singapore Airlines told me the last thing they wanted on their planes was a bunch of disabled people. China and Korean Airlines were honestly helpful, but it wasn't until I met, in Los Angeles, James Montgomery, Chairman of Pan American World-wide Services, and Bob Joyce, of Pan Am Public Relations, that I began to get somewhere.

I told them that most of the airline industry is indifferent to disabled people and that modern jets and airline procedures are an unintentional slap in the face. To Montgomery and Joyce I related instances of communications problems between airlines and disabled people which often give disabled passengers seats they can't sit in, lounges and restrooms they can't use, and food they can't eat.

On Braniff, I told Montgomery and Joyce, I had once been denied carriage because "I was a quadriplegic flying without an attendant." (I am not a quadriplegic, but apparently the Braniff employee thought everyone in a wheelchair was.) On an Eastern jet a stewardess forbade me the use of a nearby first-class restroom. As I crawled (the way I always get about on a jet) the long distance to the rear bathroom, the same stewardess spilled a food tray on me. She apologized and explained she hadn't really understood my request. I guess she thought I was just trying to con my way up to first class.

Air Canada has ordered me to sit in isolation in the rear of a 747 because "that's where I belonged." Then they told me that I should wear a suit if I was going to crawl around on their jet. Eastern has ordered me and a disabled friend to sit on blankets because it was a rule of the Federal Airlines Administration. (There was no such rule.) TWA would not allow me to sit next to an emergency exit—and then replaced me with a woman in her seventies with a broken leg.

Overall, if one is physically handicapped, flying can be an insulting test of one's endurance. Fortunately, Pan Am came through for the delegates to the Disabled Peoples' Congress. The airline agreed to waive the advance purchase requirements for the lowest fare tickets



and to permit the purchase of two tickets for the price of one by persons needing their own attendant care. Pan Am also upgraded the tickets of some handicapped persons to first and second class at no extra charge.

Upgrading permitted some delegates to use Pan Am's sleeperette seats during the 31-hour, transoceanic flight to Singapore. Furthermore, because cabin attendants give more attention to all passengers in the higher classes, the Pan Am stewards and stewardesses had the time to treat more thoughtfully those persons whose disabilites required some extra care.

Why was Pan Am so accommodating? Probably for several reasons, but one in particular is important. James Montgomery and Bob Joyce were good professionals—and they realized that, with 300 million physically disabled people in the world, a good percentage can use air travel. By making flying for them consistently pleasant, Pan Am can take advantage of an enormous market.

In America the attitude toward disability, I think most people will agree, is a mixed bag. But commonly people are at least somewhat sympathetic. In East Asia the traditional attitude toward disability is very uniform, very restrictive—and still very prevalent. Like the bygone Puritan approach to adversity, Asians connect disability to moral and spiritual transgressions of the disabled person or to the person's ancestors. Disability is a loss of honor for Asians and they hide that loss either by camouflaging the impairment and passing as able-bodied or by staying home. It is something from which traditional Asians avert their eyes. Outside of the Peoples' International meetings, only at religious events and public baths did I ever see disabled Asians.

Curiously enough, because a Westerner is such a phenomenon in Asia, I felt exempt from some of the traditional attitude. On the streets there was such intense interest in my hand-controlled automobile, I needed a companion to clear people from my driving path. On the other hand, no one ever offered to lend me physical assistance to climb a curb, go up steps, or put air in my wheelchair tires—even when it was obvious that assistance would have been helpful.

But among all nations of the world there exists acceptance of the idea that conditions for disabled people must improve. At the Disable Peoples' International I saw how disabled people are the one minority group that encompasses some portion of all other groups in the world. Most of the world's nations were represented, and easily two-thirds of the delegates were from developing countries.

Particularly in the developing world, there is enormous interest in how the United States has treated disabled people. Surprisingly, I heard over and over again that other countries would not make the same mistakes toward disabled people that America had committed. I was never precisely sure what people meant by "mistakes," but I feel they were concerned about removing architectural and attitudinal barriers, while not destroying longstanding local and family support provided to disabled persons.

Currently, this mixture of sentiments, of old and new values, sometimes produces a clash with almost satiric qualities. I have seen large billboards exhorting Asians to "befriend at least one disabled person a year." A book on relating to disabled people tells Malaysians to feel sorry for handicapped people, even though a few have been known to become useful citizens. The bullet train in Japan is very accessible and has special bathrooms and cabins for disabled passengers. Unfortunately, to board the train, I had to go up six flights of stairs at the Tokyo train station.

Japan also now requires automobile manufacturers to produce some hand-controlled cars, yet business practices and prevailing attitudes make driving by disabled persons virtually impossible. Much the same situation exists in Singapore. To rent a car there, I had an able-bodied friend obtain the car for me. Then I placed my own portable hand controls on it and—hurriedly—drove north to Malaysia.

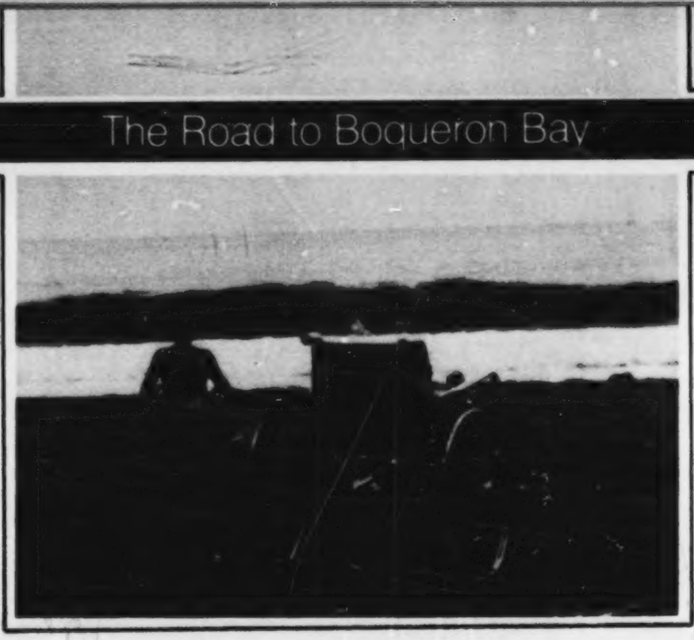
The Asian penchant for exactitude produces sometimes wry and other times frustrating consequences for disabled travelers. Once, in Singapore, a Pan Am manager wanted to know what college I had attended in the United States. The University of Texas I answered and the manager smiled. He then remarked that it was wonderful that handicapped people in America were trained to fly as passengers. "Oh yes," I commented facetiously, "it was my college major." We both smiled. Another Pan Am manager in Bangkok refused to seat me in first class, saying that "someone that looked like you doesn't belong in first class." Once I was aboard, the American flight crew quickly moved me up to first class. And so it goes.

Luckily, I had room to carry the many souvenirs I picked up along the way. But, in all honesty, the most important momentos are in the "baggage" I add to my being—memories of the beauty and elegance of the people and cultures I meet. From such "foreign goods" comes a greater awareness of myself, my culture and my people.

—Les Jenky

Mr. Jenky is a film and television actor and a consultant to Pan American Airlines on disabled travelers.

The Road to Boqueron Bay



For a holiday closer to home, take a look at the Commonwealth of Puerto Rico, where U.S. citizens require no visas and several major American airlines fly.

For a week-long trip there in 1981, I phoned ahead from Los Angeles and reserved a hand-controlled car from Atlantic Rent-A-Car. When I arrived at the airport outside San Juan, Puerto Rico, a virtually brand new, fully equipped Chevette was waiting for me. The rental for one week was $133 (all prices in this article were current for 1981) with no limit on mileage. While I was at the airport, I visited the State tourism agency and asked about accessible guest houses under $20 a night. From numerous recommendations I chose one, checked in, and then went out and drove through Old San Juan to enjoy the beauty of the Spanish provincial part of the city. In the evening I had dinner at a restaurant on the beach, and the food and the view of the tropical sunset couldn't be beat.

Puerto Rico is the smallest and easternmost island of the Greater Antilles. It is one hundred miles long by thirty miles wide with mountain peaks reaching 4,389 feet at Cerro de Punta. There are tropical rain forests also, the largest is called El Uunque. The world's largest radar/radio telescope near Arecibo is located only a few miles from prehistoric cave paintings done by Taino Indians.

On my trip I intended to explore the southwestern coast of Puerto Rico, so I drove out of San Juan on a four-lane turnpike, over the top of the island, and down through lovely mountains to the city of Ponce. Ponce is notable for a large museum housing Dutch, Flemish and Spanish paintings—and the Caribbean's only McDonald's, which does a good business.

From Ponce I drove to Boqueron Bay. At this spectacular beach I discovered to my delight a hotel operated by the Puerto Rican government and called Los Cabanas. About a mile and a half from the center of the local village, Los Cabanas has over one hundred individual units, each with patio, kitchen, living room, bathroom, and two large bedrooms—one with four bunk beds and the other with a double bed. Bedding, towels, and kitchenware are rented from the hotel, and all units are within 150 feet of the ocean. Five of the cabanas are designed with everything wheelchair accessible, including access to the beach. The prices were incredible: $12 per night or $60 per week.

Boqueron Bay has many charms, some of which are many pleasant and affordable restaurants and bars. Within a short drive are several places of interest. One is the phosphorescent bay near the town of La Parguera. On a moonless night the water literally glows. This phenomenon is caused by a large population of dinoflagellates, tiny marine animals that produce sparks of chemical light when disturbed.

Inland from Boqueron Bay, San German features a church established in 1512, called Porta Coeli (the Gate of Heaven). It is reputed to be the second oldest cathedral in the Western Hemisphere. San German is also the home of the Inter-American University, as well as several good and accessible nightclubs.

Further inland is the city of Mayagueze, site of the University of Puerto Rico's College of Agriculture and Engineering. This school has the hemisphere's largest collection of tropical plants, including lily pads the size of cartwheels. The students are from predominantly working class backgrounds, and both men and women students are relatively easy to engage in conversation, particularly on the relative merits of statehood.

While I drove to and from Boqueron Bay, it can also be reached by flying from San Juan to Mayagueze for $18 and then catching a taxi to the Los Cabanas hotel. Alternatively, a person can take two buses at a total cost of a mere $4. Of course, other parts of Puerto Rico have their own particular charm and beauty. Incidentally, the government is opening two other hotels similar to Los Cabanas—one in the mountains and the other on the Atlantic Coast. Both hotels will be accessible to mobility impaired persons.

Whether Puerto Rico ever becomes the 51st State or not, I found it a warm and friendly and accessible place. It can be enjoyed in a variety of styles and under a wide range of budgets.

—Les Jenky

Getting From

At some point in every person's life he or she wants to visit Washington, D.C. When that desire has a chance to be fulfilled, one of the first questions a person asks him or herself is: How do I decide what to do there and how do I find my way about the city?

Guidebooks are a big help. Many provide a map to give visitors a feel for the layout of Washington, and they tell how to experience "DC" (as the natives refer to the city): What are the sights, how to reach them, hours of operation, admission fees—everything a person needs to know.

Washington, D.C. The Complete Guide, published by Random House in January 1982, has still more information: This guidebook covers accessibility for disabled persons, including hearing and visually impaired persons. To my knowledge this is the first commercially published guide to include detailed information about access.

Most of *The Complete Guide's* 360 pages contain detailed descriptions about the hundreds of museums, memorials, historic sites, and other points of interest in the District of Columbia and in neighboring Maryland and Virginia. Each description includes a list of brief comments that answer questions often asked about points of interest. In the list each topic begins with a graphic symbol that directs a reader's attention to the desired information. For example, a large "P" preceeds information about parking; a picture of a table setting comes before information about food services; and a small bus preceeds a series of numbers which are the bus lines serving a point of interest.

Also in the lists, a small access symbol preceeds information about access for mobility impaired persons. The international symbol for deafness, a diagonal line over a human ear, indicates information related to deafness. A third symbol, a slash mark over an eye preceeds information related to blindness.

By consulting *The Complete Guide*, a reader can discover in advance that the walkway around the Tidal Basin is accessible; that a signed tour at the National Museum of Natural History occurs each Sunday; and that the National Zoo arranges tours for visually impaired persons and has installed a beeper signal at the crosswalk to the zoo entrance.

If a point of interest is inaccessible or has no provisions or services to assist handicapped persons—the outline says so.

As a guidebook for all visitors to Washington, the Random House book gives background information and tour hints about different areas of the city, from the Mall and Capitol Hill to the Maryland and Virginia suburbs. You'll even find a section on sports, a section on advice for visiting groups, and a welcome to international visitors.

One entire chapter (to my knowledge, again this is the first time a commercially produced guidebook has done this) is devoted to visitors with disabilities. Among other information, this chapter discusses discounted theater tickets, notes the location of elevators to subway stations, describes accessibility at many hotels and restaurants, and lists the addresses of national disability organizations headquartered in Washington, D.C.

All in all, the guidebook is a useful, well-written product. For disabled people, it is a one-of-a-kind resource and makes a complex and fascinating city easier to experience. One more benefit from *The Complete Guide* is the fact that, because disability-related information is presented in a business-like manner, able-bodied people who use the book will see that accessibility is not so much a manner of "special" provision as it is a normal and acceptable concern.

—Larry Volin

Most book stores throughout the country carry Washington, D.C. The Complete Guide *in softcover for $6.95. The authors are Judy Duffield, William Kramer, and Cynthia Sheppard, all long-time residents and fans of the city. The book publisher, Random House, comments that organizations of and for disabled persons were consulted during the production of the guidebook.*

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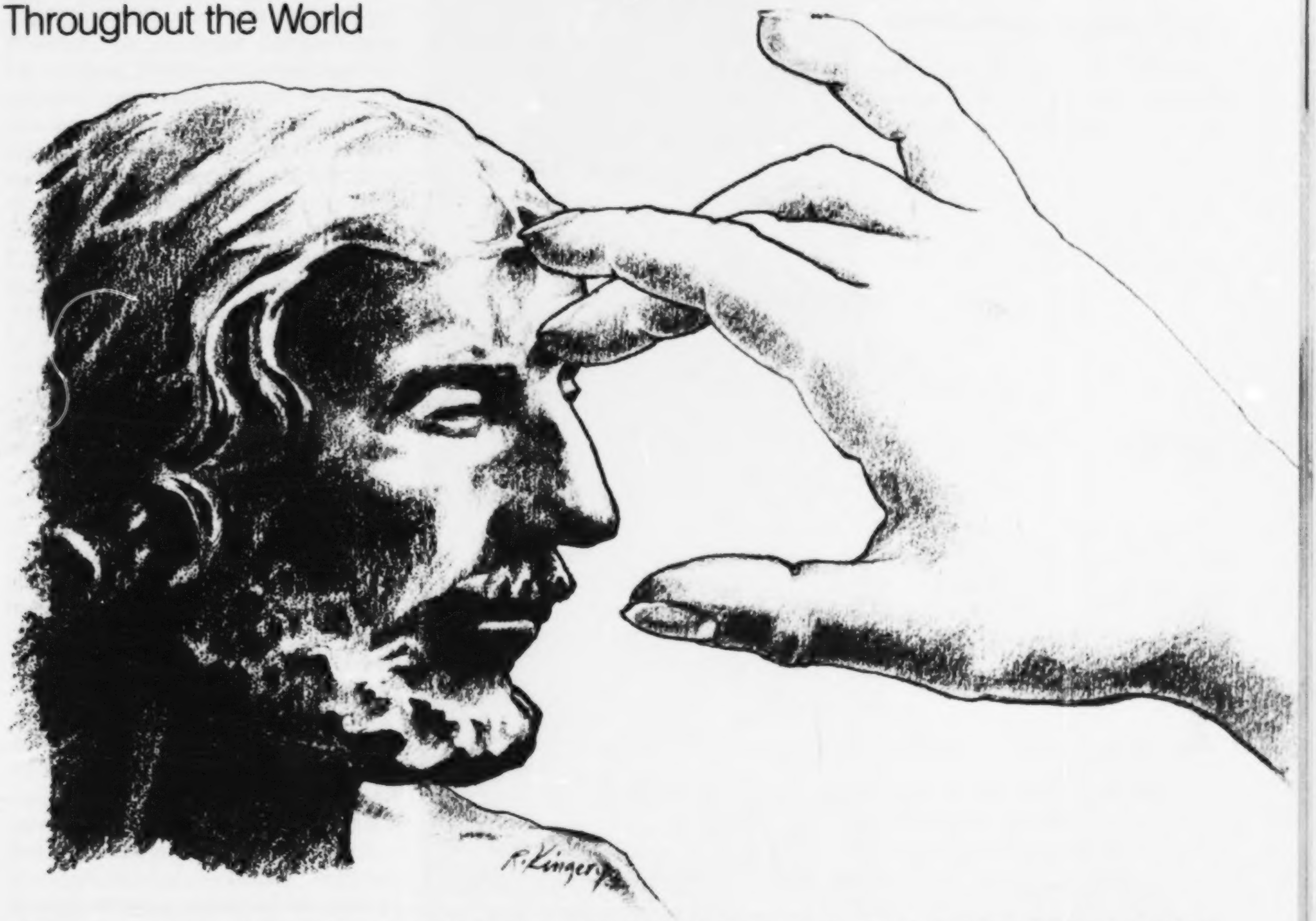
to

Through Gardens of Forbidden Fruit

Access at Museums Throughout the World



A few years ago I was visiting a friend in Philadelphia when she suggested an afternoon at the Rodin Museum. I met the idea with mingled eagerness and dread.

Sculpting has been my lifelong hobby, and what could be more thrilling than so many works by the great master all gathered together in one place? But museums were places of guardrails and cold glass cases and signs that growl DO NOT TOUCH — all conspiring to prevent blind people like me from experiencing anything but frustration. At the Rodin Museum I would feel like a starving person being led through a garden of forbidden fruit.

But my friend assured me that this museum would be different. To my astonishment I discovered that no barricades kept me from the displays, no signs glared, no guards shouted threats. In most museums I feel like a furtive criminal, stealing fleeting tactile glimpses whenever no one seemed to be watching. But here the guards were actually delighted by my interest. They even called my attention to pieces I might otherwise have missed. Like any other visitor I could marvel at "The Prodigal Son," "The Thinker," and "The Kiss."

In other countries I have found museums generally more receptive to blind patrons than those in the United States. At the Museum of Anthropology in Mexico City I was given a pass which literally granted me a free hand to touch exhibits. At Oslo's Sculpture Garden and even at Madame Tussaud's Wax Museum in London, I was permitted to touch anything I could reach.

Understandably, the staffs of American museums are deeply concerned with the protection of the valuable

As much as possible of every program should be accessible.

objects in their charge. But they sometimes seem to lose sight of the fact that these objects must be made available to the public, including those persons who have disabilities.

Today, with soaring inflation and cutbacks that bite into every "non-essential" program, museums recognize that they must court public support in order to insure their continued existence. Efforts to reach a wider public coincide with the growing movement among disabled people toward full participation in society. Consequently, substantial improvements in accessibility are occurring in some museums.

Many museums built since 1973 now offer complete access to people with mobility impairments. For example, the Kimball Art Museum in Fort Worth, Texas, has ramps and elevators which make every gallery accessible. Works are displayed at a height from which they can be enjoyed by both seated and standing visitors. Many older museums, such as the Smithsonian Institution in Washington, D.C., have also worked

conscientiously to eliminate architectural barriers. In fact, throughout the area of Washington that includes the Smithsonian museums, the White House, and the Capitol, curb cuts and handicapped parking are readily available.

Deaf visitors to Smithsonian museums may take tours conducted in American Sign Language. The Smithsonian, the Oakland Museum of Art, and several others offer courses in sign language to volunteer and paid staff members so they will be able to conduct signed tours. New York's Museum of Modern Art heads a consortium of ten museums in the metropolitan area which share interpreters and coordinate publicity about their programs for deaf people.

Generally, signed tours are separate services for deaf persons. Adding interpretation to regular tours is seen by museum professionals as creating a time problem. Since a deaf person cannot watch an interpreter while studying an exhibit, that patron needs more time for a tour than a hearing person.

The Mary Duke Biddle Gallery at the North Carolina Museum is one of several "touch galleries" which have opened across the country. These galleries feature exhibits which may be touched by blind and sighted visitors. Mentally retarded visitors and many people with learning disabilities have also benefited from the opportunity to touch objects on display. Touch can be one of the clearest, most direct avenues to learning. In many instances its immediacy offers a more intimate, direct experience than sight or hearing can provide.

But, like separate, signed tours for deaf persons, touch galleries have serious drawbacks. They allow the blind visitor only a limited and segregated experience of the museum's offerings.

While such an experience is certainly better than none at all, it can be frustrating, if not maddening, to anyone who hungers for more. Also, such galleries run counter to the philosophy that disabled people should be integrated into programs in the least restrictive manner possible.

Many museum conservators insist that art objects and historic relics cannot be touched at all without causing serious deterioration. Some argue that resin or plaster casts of such objects should give blind visitors an adequate experience. Original pieces, they contend, must not be touched under any circumstances. So confirmed are they in this attitude, few have ever examined the alternatives.

Steve Handschu is a partially blind sculptor. Because of his need to become more familiar with the work of his peers, he became concerned about tactile accessibility in art museums. Eventually, he collaborated with John Bertalan, an art conservator who now heads the Southern Regional Conservation Center in Birmingham, Alabama. The two men found that the application of different lacquers or patinas could protect many art works and historical pieces. With the protection of patinas these pieces could be touched without damage from the natural oils of the human hand.

In addition the patinas would help protect objects from dust, soot and other pollutants in the air. Thus, the use of protective coatings not only gives blind persons greater access to exhibits, it also helps protect priceless pieces of art from the inevitable ravages of time. John Bertalan recently addressed the National Museum Advisory Task Force, an organization which brings together museum personnel and disabled activists. He urged his colleagues to recognize that blind visitors could easily be given far greater access, and that museum collections would suffer no ill effects as a result.

George Covington is a partially blind photographer. (See "Disabled USA," Volume 4, Number 4-5, pages 15-17 for an article on Covington.) He is active in promoting the use of photographs to aid museum visitors with low vision. Many visually impaired persons cannot see well enough to take in a whole painting or museum display. They can often obtain a clearer impression by looking at a photograph of a given work. Photography offers a simple, inexpensive means to make museum exhibits available to thousands of people with partial sight.

But it can be taken too far. For many people with low vision even a photograph gives only a fuzzy, disjointed image. Furthermore, while photography is an invaluable tool whose uses are only now being explored, it is by nature only an indirect, secondhand experience. It is no substitute for the immediacy of touch. Why should visually impaired people content themselves with photographic representations of objects if they can instead experience those objects directly?

Professional interest in museum access is a recent development but a steadily growing one. George Washington University, in Washington, D.C., currently offers what may be the world's first course for museum personnel on accessibility for all disabled people. The National Access Center, also in Washington, D.C., is a newly founded organization dedicated to furthering museum accessibility across the country. According to its director, Larry Molloy: "We do not initiate legal action. Rather we provide simple cost-effective solutions that convince museums that accessibility is in their best interest."

Yet there is still a long way to go. So far, most progress has been made in large museums in the nation's urban centers. Museums in smaller cities and large towns generally deal with smaller populations of disabled people. Their funding is limited, and access for disabled people is seldom a priority.

Even in the larger museums there are still many improvements to be made. Many older museums, and even some which have been constructed more recently, are still inaccessible to people with mobility impairments because of architectural barriers. Only a handful of museums offer tours in sign language. And most museums are still filled with glass cases and signs that warn DO NOT TOUCH!

Section 504 is generally being interpreted to mean that not all, but only part of every federally funded public program need be made accessible. I

Protective coatings give blind persons access (and) protect art from the ravages of time.

believe that Section 504 should be read more comprehensively—as much as possible of every federally funded program (in this case, every museum which receives federal money) should be made accessible.

Obviously this is not a goal which can be achieved overnight, or even within a few years. But if museums saw it as a long-range goal and moved slowly and steadily in this direction over the decades ahead, they would be promoting the attitude that the participation of disabled people should not be defined in terms of limitations, but in terms of possibilities.

The need for this change in attitude became clear to me a few months ago when I visited the Hirshhorn Gallery of Sculpture in Washington, D.C. I was filled with anticipation by the thought of exploring one of the finest collections of sculpture in the world. But I quickly discovered that the Hirshhorn has placed only ten percent of its collection on a touch tour, designating each of these pieces with the letter "T." For me and for all other blind visitors then, ninety percent of all the works on display remain out of bounds.

I asked to discuss the matter with someone in authority, and eventually spoke with Ted Lawson of the museum's education department. I told him how much I appreciated the opportunity to touch the pieces on the touch tour. But why, I asked, were so few pieces marked with the letter "T"?

"We never intended to make *all* of the pieces available to be touched," Mr. Lawson explained. "We designed the touch tour so that it would take about an hour. It's meant to give a good introduction to sculpture."

"That's fine," I said. "But I'm very interested in sculpture. I could happily spend all day in a place like the Hirshhorn. And I'm not the only blind person who feels this way."

I asked him if he had heard about the Rodin Museum's policy toward blind visitors. There about ninety-five percent of the sculptures can be touched, all but the very few which are housed in glass cases. Moreover, the museum staff claims that they have sustained no damage, though blind people have been touching their displays for years.

No, Mr. Lawson said, he had not heard about the Rodin Museum's approach. "In six years," he remarked, "you are the only person who has ever asked to touch more than the pieces we have (designated)."

"I think more people will begin to ask now," I replied. "When they do, I hope the Hirshhorn will give their requests very serious consideration."

If blind people, and all people with disabilities, are ever to know a sense of true equality, we must not be content to accept the finer things of life in meager doses of ten percent. For too long we have been taught to be grateful for whatever fragments are meted out to us, to feel that we have no right to ask for more.

But access is a right and not a privilege. If we persist in challenging assumptions and proposing viable solutions, we can work steadily to bring about the changes which are still so sorely needed. We must keep in mind that some day all museums should be as open and accepting as the Rodin Museum of Philadelphia.

—Deborah Kent

Ms. Kent is a free-lance writer.

From Lusaka to the Ivory Coast

Working and Touring in Africa

"A blind person traveling in Africa misses nothing, for Africa is smells, tastes, touch, and people," explains Harold Snider. In the last few years his consulting business has taken him all over the world and many times to the middle and western parts of Africa. "Travel in Africa is more fun than in Europe," he feels, "because Africa is more casual and more involved with people.

"In Africa, disability is not rare—it's very visible—and I don't encounter nearly as much stereotyping as I do elsewhere."

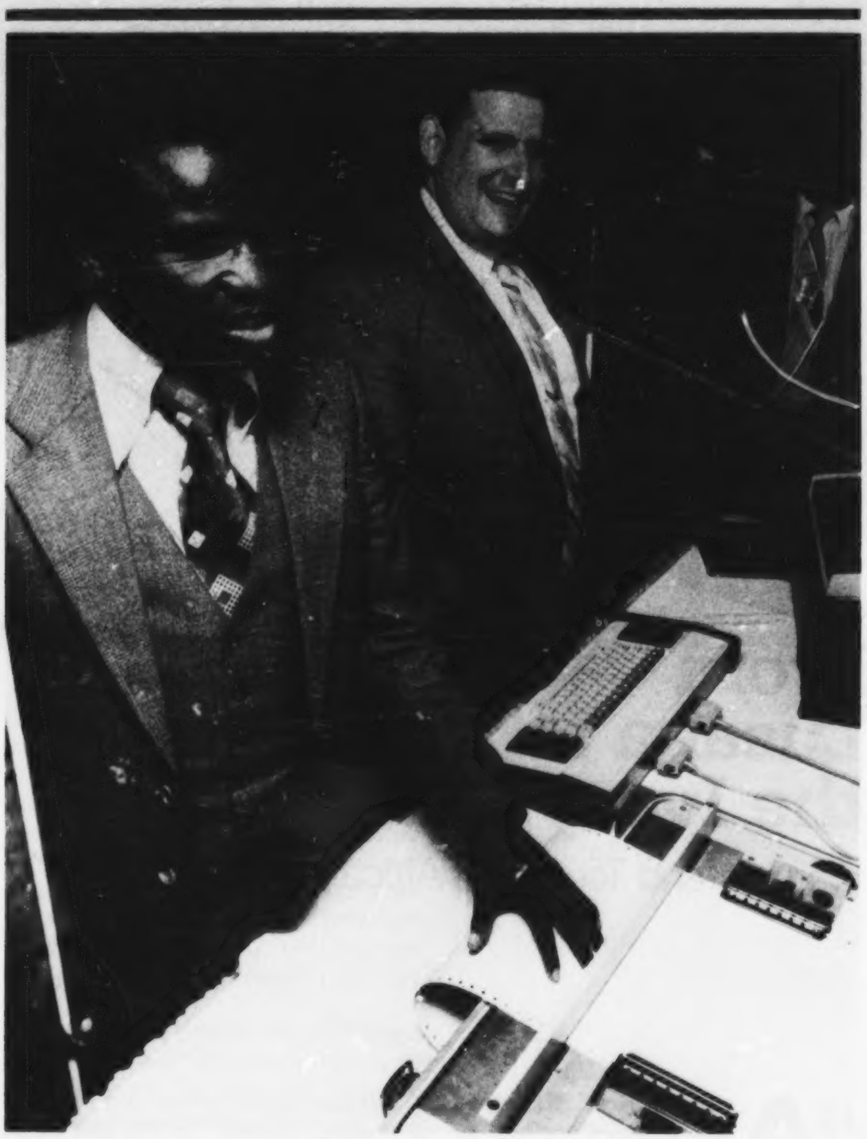
Still, blind Africans often lack the human services and technical aids commonplace in more developed economies. Trying to fill some of this void has taken Snider to Africa three times in the last year alone. This comes as a consequence of a business trip Snider took last December. In the airport at Lusaka, Zambia, he was met by a sister-in-law who teaches at the national university and who has long written to Snider about the difficulties facing Zambian blind people.

Over 450,000 people in Zambia, about 7½ percent of the country's six million people, are thought to have blindness. This is the highest incidence of blindness among East African nations. Yet little of the country's resources are directed to help blind people live independently. According to Snider's sister-in-law, even fundamental aids such as brailled books and instruction in cane mobility—and even canes themselves—are simply unavailable.

Confronted by the forceful and earnest concern of his sister-in-law, Snider wryly admits to having been "cornered in Lusaka." He agreed to stay on four additional weeks and see for himself what could be done to assist blind Zambians. This has sparked a major aid project involving Zambian organizations interested in blind people, the International Telephone and Telegraph Corporation, the National Federation of the Blind, and Snider's own consulting firm, Access for the Handicapped.

In brief, the project has two parts. In one, a handful of Americans (most of whom are blind) are spending several weeks at a time in Zambia and teaching blind people the techniques of cane travel. The Zambians in turn will teach succeeding classes of blind people in the country so that in a little over a year 2,000 blind Zambians will have learned cane travel.

The other part of the project provides technical aids to blind persons in Zambia. Two thousand white canes and 10,-



000 replacement tips are coming from the National Federation of the Blind. The International Telephone and Telegraph Corporation is installing a printer on its computer in Zambia to produce brailled books—not only in English, but in each of the four major African languages used in Zambia.

With his recent concentration on Zambia, plus his earlier travels throughout the African continent, Snider has become well-versed in travel to an area about which he is enthusiastic. "In Africa life is slower and less complicated" and the flexibility of both people and organizations there is a definite advantage for a blind traveler.

"Once I took a bus from Nairobi, Kenya, to a small town near Thikka (the same as in the title of the PBS television production "The Flame Trees of Thikka"). Ultimately, I wanted to get to a school for blind people. Having ascertained my final destination, the bus driver made a small detour and took me to the front door of the school.

"Another time I became ill and went to an African hospital. I got good medical treatment and the doctors didn't fuss over my disability, as so often is the case in this country. African doctors are well-exposed to blindness and visually impaired people, so they were interested in treating my illness—not my disability."

The common way to travel about Africa is by plane. Snider has found air travel convenient and readily accessible. "African airports are smaller and more people oriented," he says. "People offer to help and know when to accept a no answer from a disabled person. Their questions are more sensitive and they don't assume they already know what is best for you.

"Also, at airports in Kenya, Liberia and the Ivory Coast I am told about things to expect in advance, even," recalls Snider ruefully, "about the giant roaches that one encounters on pedestrian paths across the runways."

According to Snider, the key for blind travelers is good preparation for the trip, ready access to important information (Snider, for example, records his itinerary on cassette tape), and the study of background information about where you are going. Also, it's important to talk with others who have been there and to always write in advance to make and to confirm arrangements. Finally, be

> **"THEIR QUESTIONS ARE MORE SENSITIVE AND THEY DON'T ASSUME THEY ALREADY KNOW WHAT IS BEST FOR YOU."**

assertive, says Snider, and don't shy from asking questions and seeking assistance. But, Snider concludes, this is all no different from what all travelers should do.

Typically, the hardest part of travel to Africa for Snider occurs whenever he flies out on an American airline. Foreign carriers do not have the rules and restrictions on blind travelers that American carriers do. For instance, foreign carriers have been more sensible about permitting blind people to retain their canes during takeoffs and landings.

Coping with foreign currency is often thought by some sighted people to be a particularly difficult task for a blind traveler. In fact, the opposite is true. Most other countries, Snider has found, print the different denominations of their currency on paper of different sizes, which is actually convenient for a blind person to learn. Typically, on arriving at a foreign airport Snider will ask a person, as he said, for instance, in French to a baggage handler in the Ivory Coast, "Show me the money here." Invariably, people respond to Snider with a thorough presentation of the local currency.

Most African countries, nevertheless, do present formidable barriers to blind travelers who use guide dogs. Because of popular attitudes and national policies, bringing a dog into an African country is practically impossible. Each nation typically has strict rules against the importation of animals. A waiver from a nation's consulate is conceivable, but once the blind person arrives in Africa with his or her dog, even more serious problems can occur.

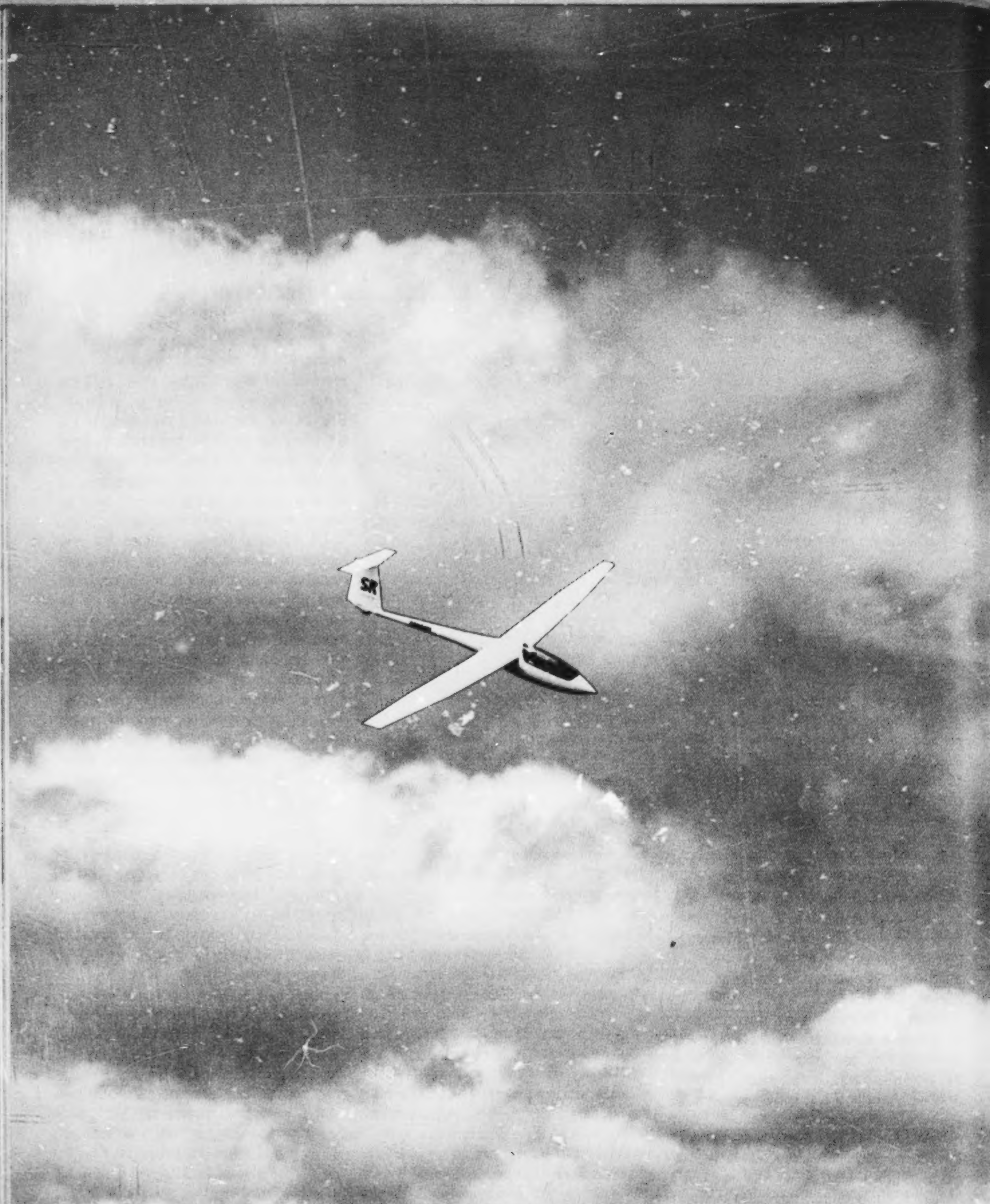
Many people and also police officials will react unfavorably. First of all, says Snider, dogs are not considered pets. Secondly, some fear and hostility toward dogs remain in the minds of many because of the manner in which former colonial authorities employed dogs to control and intimidate Black Africans. In Nairobi Snider has an acquaintance who does use a guide dog. But he has been instructed by the police against bringing the dog downtown because it causes too much of a stir among crowds of people fearful of the large German shepherd.

Blind travelers should bear another cultural characteristic in mind when in Africa. To illustrate this, Snider refers to the precipice, above towering Victoria Falls, that has no guardrails. It's just not part of the African view of things to erect fences to guard tourists. Standing in such a vulnerable location for Snider was a thrilling experience, notwithstanding he was a bit uneasy.

In visiting and doing business in Africa, blind travelers need not limit themselves to the larger cities and the most frequented points of interest. Snider, for one, claims that most of his traveling has been "in the bush," where small towns, villages, and farms are located. In this territory he gets around by bus and by hiring drivers, both of which are relatively inexpensive.

Of course, living in Africa for any length of time is no picnic. There are dangers against which a visitor must take precautions assiduously, such as always removing the peel from many fruits and eating only the pulp. But on the other hand, the marinated and fried caterpiller was, according to Snider, quite digestible. Africa has thousands of delights to experience, some of which Snider knows firsthand, and he encourages other people, including blind people, to experience them.

—Robert Gorski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SOARING

A Dream That Always Lives

At a small airport in rural South Carolina a young woman and her two sons scan the skies. Overhead a flock of graceful sailplanes swoop and soar, looking more like long sleek birds than aircraft. Finally a familiar craft comes into view.

With Terry Frazier at the controls, the sailplane drops low over the grassy field and then touches down on one center wheel under the fuselage and another wheel under a wing tip. Young Matthew Frazier, and his brother Ben, race to the plane to greet their father, who hops out of the tiny cockpit and into his waiting wheelchair.

Competitive soaring, as sailplane racing is called, fulfills a lifelong dream for Frazier, who is a bilateral amputee. He has always wanted to fly, but his dream was short circuited in 1966. In that year he left college to join the army, and volunteered for Vietnam. Ten months later he sustained combat injuries which led to four operations and the amputation of both legs.

Terry Frazier still wanted to fly, but at Fitzsimmons Army Hospital in Denver, Colorado, he turned his attention to rehabilitation. Fitzsimmons specialized in orthopedic problems and was flooded with amputees from Vietnam. The hospital staff established an experimental program to determine the recreational activities amputees could do to make their lives more complete. Frazier says that he was their bilateral guinea pig.

A self-proclaimed thrill seeker and former gymnast, Frazier was a perfect choice for the experiment. Along with other amputees he learned scuba diving ("The one-leggers did fine with scuba; but I didn't like it because I floated upside down."); horseback riding (he decided it was fun, but too risky); swimming; and water and snow skiing.

Frazier experienced his greatest sense of accomplishment as a snow skier. After a short learning period he was flying down moderately difficult slopes in his home State of Colorado. He recalls that skiing made him feel special. Once, his group from Fitzsimmons even spent a day skiing with four Playboy bunnies. "About twenty one-leggers had to share two bunnies, and I had the other two bunnies all to myself," Terry recalls with obvious pleasure.

Perhaps it was that old urge to fly that led Frazier onto the high dive at a Colorado lake one summer day. A woman lifeguard watched with obvious alarm as this man without legs sailed into the air and toward the lake. She swam out, ready to make a rescue, but quickly realized her lifesaving skills were unnecessary. Frazier and the dark-haired girl chatted casually as they swam back to shore. That chat led to friendship, romance, and eventually to marriage. For Terry Frazier, sometimes being a daredevil pays off handsomely.

After his marriage Frazier completed college, earning a Ph.D. in English from the University of Washington, and achieved his career goal of becoming a college English professor. With swimming and wheelchair basketball as his main recreational outlets, he settled into the academic life at the University of North Carolina at Charlotte, where he also acted in Shakespearean plays.

The dream of flying never left Frazier. One summer he and his family attended a reunion of old friends in Aspen, Colorado. The group decided that to prove they were not getting old and set in their ways they should attempt an exciting, new activity during their vacation together.

The rest of the group set off on a white water raft trip, but that did not appeal to Frazier, so he elected to stay behind and take care of the children. On that day, he says, "I saw a glider come floating out of a valley over the town of Aspen. I decided that would be my excitement," and arranged a ride with a licensed sailplane pilot. "As the plane lifted off the ground, I was hooked."

Realizing that perhaps his old dream of flying need not be abandoned, he pursued the idea of becoming a licensed sailplane pilot. A sailplane has no engine. Soaring, as the sport is called, depends on the sun heating the ground, and then the ground heating the air above it and causing the air to rise. Pilots find little columns of rising warm air and circle inside them.

To become a licensed pilot, Frazier overcame several obstacles related to his handicap. First, there were no hand controls available with which to operate the plane's rudder. All sailplanes used foot pedals to do this. But Frazier worked with an engineering professor at the University of North Carolina and together they constructed a hand-operated rudder control.

FAA approval was slow in coming, so Frazier decided to learn to fly with a pair of walking legs. The VA later sponsored the design of his "flying legs" which are narrower in profile and designed to clamp onto the aircraft's foot pedals.

Frazier did not abandon, however, the hope of gaining FAA approval for the hand-operated control. He says, "I figured that if I was going to fly, I might as well try to make the sport accessible to other handicapped people." With pride, he reports that a quadriplegic person in New York also flies a sailplane using the rudder Frazier designed.

What is the appeal of soaring? Says Frazier, "Soaring offers you a kind of movement you don't have anywhere else in your life. It's movement in every dimension including the vertical. We live very horizontal lives, and when I go soaring, it is my form of ballet. It's a sort of dancing. It is very lyrical and beautiful and poetic.

"It is silent, and you're in total control of where you are going and what you are looking at. It is very relaxing and isolated—you have time to think through a lot of things and put them in proper perspective. For me, it's a kind of physical poetry, a poetry of motion."

Frazier now soars competitively. He persuaded the Invacare Company, which manufactures the wheelchair he uses, to sponsor him as a competitive pilot, much as other companies sponsor race car drivers. Invacare liked the idea of helping to prove that soaring is a sport in which handicapped pilots can compete and so the company shares the cost of Frazier's racing sailplane, Sierra Romeo.

As for the challenges a handicapped pilot faces, Frazier explains that in addition to developing a system for flying the aircraft, a disabled pilot must be able to get in and out of the plane. There is also the risk of a pilot's air currents disappearing, in which case he cannot make it back to his home airport and must "land out" on a small rural airport, a crop duster's air strip, or a field. When landing out, Frazier uses a peg leg and a cane, which he carries in the plane, to make his way to help. Many sailplanes also have two-way radios.

Asked about the danger of the sport, Frazier replies, "I like risk. I seek risk in many phases of my life." He adds that there is real physical danger in the sport because of the possibility of two sailplanes colliding, but he feels the thrill of flying is worth the risk.

Does a disabled pilot face any attitudinal barriers? Frazier answers, "The attitudinal barriers most handicapped people have to deal with are their own. Other people cannot help but view us as different. But when they discover that I don't care about the difference, then they care about it less and less until it gets to the point where they don't care at all.

"A lot of my friends forget that I'm disabled because I don't push it—I don't see myself as disabled. I see myself as having different opportunities in the world. So if disabled people focus on their desires, their abilities, their achievements, then other people will think about them that way."

Whether Terry Frazier is teaching a college English class, playing the role of the fool in a university production of *King Lear*, coaching third base for his son's baseball team, or racing his sailplane, he is living his life to the fullest. He is soaring.

—Vicki T. Collins

Ms. Collins is a free-lance writer.

Three Sportspersons

DAVID FRANK

I am a born sportsman. I can even remember being a toddler and aimlessly watching a ball game of some kind. When only pint-sized, I was collecting baseball cards and gluing them into scrapbooks. But I quit Little League after only one summer of failing to find a batting style in imitation of the professionals I followed.

Unawareness. Mistakes. Why didn't I bother listening to my Little League coach when he gave hitting instructions? It was because I could not escape from a world of silence.

I owe a great deal of credit to the Clarke School for the Deaf in Western Massachusetts, which I attended for ten years. This school played a major role in developing my speech and lipreading skills so that I could communicate with hearing persons. Tactfully, Clarke prepared me to enter the "able" world.

Although in prep school I took longer than my peers to reach the same level of academic performance, I won good friends by participating in athletics. My active involvement in interscholastic competition (and journalism and theater) were beneficial to me personally and to my future career. But I also wanted to prove that hearing impaired people can do anything as well as anyone else, except use the telephone and other similar activities.

My efforts paid off. I was selected the sports editor for the school newspaper, which was voted as the second best overall prep school newspaper in New England. I was chosen to co-captain and captain my cross-country and track teams, respectively, as well as being named the most valuable player in these varsity sports. Most important, I was honored as the most outstanding male student in the senior class.

But college was much more difficult. In my sophomore year at the University of Denver, after much frustration from not being able to follow class lectures and discussions, I concluded that I was not receiving a full education. Fortunately, at the same time I heard about the sport management program being offered at University of Massachusetts-Amherst, a school which also provided interpreting services. Once I learned of the program, I knew it was the field for my life.

When I was a junior at college, I was offered a position as a sports director at a small day school for the deaf. It was something I couldn't refuse for two reasons. One reason was that I wanted experience that would benefit my future. The other reason was that the school did not have an established athletic/physical education program.

Since the day school had no funds for physical education, I agreed to volunteer as a one-person department, but I also arranged with the university that my work would be considered as independent study for school.

Due to the lack of facilities and money, I used the school's small auditorium as the "gym." Also, I always took advantage of good weather by playing outdoor sports like softball and volleyball (the local Lion's Club donated a variety of balls as well as equipment) at a nearby field. When the weather was not permitting, I had to think of innovative ways to have games or activities that were playable in the "gym." One activity was ping pong, played on a surface formed by putting two folding rectangular tables together. It was a little below the standard-size playing table, but it worked.

Another project of mine was a Creative Activities Period for hearing impaired students mainstreamed into a public junior high school. I intended the period to help students develop interests and learn new skills. Among the activities were mime lessons, meetings of the Junior National Association of the Deaf, sports, and other group activities. The former two were dropped from the program after only a brief time, due to the lack of students interest.

The sports section was so successful, students wanted to continue it at their new high school. One reason was they enjoyed the competition. Another reason, in my opinion, was that I was a good role model for them, since we had the same handicap.

The fact that there is a growing number of hearing impaired, mainstreamed students, many of whom are athletes, concerns me. I fear their desire to participate in inter-scholastic athletics may be limited for several reasons. Many coaches don't have adequate knowledge about deafness. On the other hand, many deaf athletes are not fully comfortable with communicating to hearing coaches and teammates.

Finally, some deaf athletes are older than their peers and reach the maximum eligible age for competition. Age limit rules sometimes unfairly bar deaf students from participating in sports.

If a deaf athlete reaches the age limit and still has another year in high school, he or she must petition to play for one more year by contending they are physically even with their hearing peers. Nevertheless, there are many inconsistencies—in one case a 285-pound deaf person is allowed to play football, while in a different case another football player, weighing 185 pounds, is denied. Some cases seem to be decided on personality, rather than on consistent rules and consideration of the frequent lag in education that many deaf students experience.

There is a long way to go before handicapped people share an equal opportunity to enjoy and be actively involved in the world of sports. I recognize the hurdles for us to overcome. I acknowledge the limitations we face. But it is most important for us to embrace these challenges with a strong will and a winning spirit. After all, that is part of the art of sports and athletic competition.

—David Frank

Mr. Frank is a free-lance writer and an instructor in recreation and physical education.

JILL ROBINSON

"I'm into sports because it's fun," says Jill Robinson as she transfers from her wheelchair into the office chair at her desk. Piles of paper, yellow pads, and legal briefs are before her. "I'm athletically inclined. If I could find someone to pay me to be a professional athlete, I would do it." Unfortunately, swimming, diving, playing basketball, and performing track and field events must be done in her spare time, and she works as a lawyer in a firm specializing in workers' compensation and personal injuries.

She had polio at the age of three. She is now an energetic person, with strong arms and shoulders and good trunk stability. Five years ago when she moved to Washington, D.C., she joined a competitive wheelchair athletic team. Called the UFO's (for Unidentified Flying Objects), the team's T-shirt shows a wheelchair flying through the air.

About a dozen people comprise the team and play basketball, swim, lift weights, and compete in track and field events. "They are a diverse group of people," says Robinson, commenting on her teammates' educational and social backgrounds. "Also, some people are really ambitious, aggressive career types, while others are the opposite. We come together because of our common interest in sports.

"The team is co-ed only because I'm on it. Generally, we have a harder time finding women who want to compete. There are more men in wheelchairs, and men tend to get disabled after they have already learned sports. Women are more likely to have been disabled from birth or since early childhood. I'd love to find enough women for a wheelchair basketball team."

Regretably, Robinson has found that playing basketball brings out male chauvinism in men. "I don't know what it is about basketball, but I've heard this from other women competitors as well. Men will be helpful and cooperative people in individual competition events, but put them in a group on a basketball court and they hesitate to pass the ball to a woman, or they make little cracks like 'Don't do that to the *girl.*'

"And men have been less willing to teach women the skills they need to perform well." Being assertive with her teammates was the only remedy Robinson found effective. Now she is treated with respect and the team works well together.

Three years ago the UFO's competed in national track and field games held at the Woodrow Wilson Renabilitation Center in Virginia. Robinson's best performance at the meet was in shot put, where she won a silver medal (second place) by putting the six-pound shot a distance of 4.8 meters.

In both discus and javelin, Robinson won bronze medals (third place). Neither the discus nor the javelin are modified in any way for wheelchair athletes, although the techniques for throwing them differ from those used by able-bodied persons. "People who can stand," explains Robinson, "twirl themselves around a few times to get momentum before releasing the discus. In a wheelchair, you move your arm back and forth to build momentum, or with a javelin you can also simply and quickly bring your extended arm back and then thrust it forward while releasing the javelin."

Despite her dedication to her team, Robinson has been unable to compete much recently. "Whenever I don't compete, it's because I'm busy at work. If it's a choice between work and play, work wins."

But the two interests are not entirely separate, for Robinson feels that sports help her do better work. "In its competitiveness, a lawyer's work is very similar to sports. You're fighting someone and one of you has to win and the other loses. In both law and sports, being able to project toughness and psyche out opponents is important. Also, in athletics you test your limits, and this carries over to work, where you also strive to extend yourself. Any sports competition helps to build your confidence in general."

Being active physically is also important for endurance on the job. "Vigorous exercise helps increase your overall mental alertness and productivity. In particular, a swim in the middle of the day really wakes me up for the afternoon. I come back from the pool charged up and raring to go."

Sports plays the same role in Robinson's life as it does in the lives of many disabled and nondisabled people. It helps her stay healthy and strong, and it builds a social network. But mostly, it's fun.

—Dale Brown

Ms. Brown is on the Communications staff of the President's Committee.

JOE LYTTLE

In the late sixties, while earning a degree in recreation administration, Joe Lyttle heard some talk of recreation designed for disabled persons. He was intrigued enough to spend a night working with disabled veterans at the Woodrow Wilson Rehabilitation Center in Fishersville, Virginia. Nevertheless, at the time, Lyttle did not intend that recreation and disabled people would be the focus of his career.

Combat in Vietnam and injury to his spinal cord changed those plans in 1968.

During his very first phone call to his wife after his injury, a call he made from a U.S. Navy hospital ship, Lyttle asked her to contact the Wilson Center's recreation director. Even at this early point in his rehabilitation, while disability was still a fresh, unfamiliar, and painful experience, Lyttle was focusing on employment. A job, he felt, was important for him to maintain himself independently.

At the Wilson Center he had seen disabled veterans involved in recreation—and they were active, busy and happy about what they were doing. Also at the veterans' facility he had seen disabled individuals holding down many jobs, including administrative positions. Lyttle decided that this was where to apply his training and education in recreation administration. His contacts with the Center were fruitful, and six months later Lyttle was discharged from the service and hired at Wilson as a recreation supervisor.

At Wilson Lyttle directed activities in well known sports such as basketball, swimming, bowling, and baseball. He also directed some, at the time, less well known activities for disabled persons. Among these were canoeing, fishing, and rifling. Recreation at the Center also included craft skills such as wood working, candle making, and leather work.

In 1973 Lyttle helped organize serious sports competition for disabled persons. That first year of what has turned into an annual sports event involved 68 contestants from both Virginia and West Virginia. The following year 100 persons competed in a score of events ranging from archery and weight lifting to bowling and basketball.

Lyttle's favorite events were slalom and discus, but in his own words he "was never a quality competitor." Gold, silver and bronze medals eluded him after the first year and went to individuals who were a little stronger, more aggressive, or more talented. The games he helped organize were no showcase for his own prowess. Instead they were for Lyttle fun, entertaining, and the fruit of his dedication to his profession.

Nor were glamorous achievements his from being a sports coach for disabled athletes. "As a rehabilitation professional," says Lyttle, "you work with either recently disabled people or with older people—and for only a while. I don't get a chance to see people develop their athletic potential fully and then set the world on fire. Instead I motivate and whet appetites of disabled persons who graduate from the Center and later on do well in competition."

Lyttle has been responsible for opening up new recreational activities for disabled persons. To his knowledge the first deer hunting excursion by disabled persons was organized by him not long after being employed at the Wilson Center. Lyttle had never hunted before, but he became interested because disabled people, he felt, should not be denied any activity available to everyone else. "Disabled people like to do things just like able-bodied people. Our interests are as varied and the physical limitations on what we can do are falling by the wayside."

So early one morning, Lyttle and several other disabled people got themselves tractored into a mountain wilderness. They came with hunting rifles and adaptive aids to help them aim their guns and track moving quarry. After the success of this excursion, Lyttle worked with interested disabled people to successfully advocate changes in game regulations governing equipment and vehicles, so that disabled hunters would have a fair opportunity to enjoy the sport of hunting.

Since 1979 Lyttle has been in charge of his own program at the Roosevelt Institute for Rehabilitation in Warm Springs, Georgia. In the program he has 50 disabled persons who are patients at the hospital and over 170 other persons who are at the Roosevelt Institute as part of their vocational rehabilitation.

With these people, who range in age from 10 to 50 years, Lyttle directs programs for general recreation activities, for which the purpose is enjoyment, interaction with other people, and the enhancement of self-esteem. He also directs programs designed as therapeutic recreation—activities designed in response to a physician's prescription that a patient, for instance, increase his or her range of motion, improve balance, or have the cardiovascular system tolerate greater stress.

As at the Wilson center, most of Lyttle's students at the Roosevelt Institute are recently disabled. Many are children and teenagers without much general life experience. With many students Lyttle finds it important to enhance social skills while teaching the students sports, crafts, and other recreation routines. Interacting with other people involves understanding their expectations and responses. It also involves communication and behaving in ways that are effective and that generate acceptance and respect.

Interacting with others can be complicated by disability - but skill at this is necessary for anyone to enjoy all but the most isolated leisure pursuits. Individuals successful in sports are generally good at interacting with other people. Lyttle, Jill Robinson and David Frank are examples. They also show that much of what contributes to success in sports also contributes to success in employment.

—Robert Gorski

To Stretch and Test Limits

Healthsports Programs at the Vinland Center

A rustic campsite in the Minnesota woods in spring. Small cabins surround a brown, wooden dining hall. Nearby is an amphitheater and a lakefront with kayaks and canoes. One expects to hear rambunctious children running around and having fun.

Instead one hears adult voices, the creak of crutches, the tapping of canes, and wheelchairs rolling over wooden ramps and through grass. Fifteen disabled adults are living here for three weeks and learning a wide range of sports and other recreation activities.

The overriding interest for being in the camp is enjoyment. But the disabled people leave better prepared to participate in recreation activities with able-bodied friends, family members, and co-workers. They also leave more knowledgeable about keeping physically fit and taking charge of their own health care.

The camp is sponsored by the Vinland National Center, which is located in Minnesota and promotes participation in recreation by all disabled persons. Among the disabilities at a typical camp session are blindness, cerebral palsy, speech impairment, brain injury, and multiple sclerosis; and some participants have more than one disability. Some people come on vacation time from their work; others are in rehabilitation programs. Since Vinland encourages reverse mainstreaming, a camp group also includes able-bodied persons.

Horseback riding, bicycling, archery and canoeing are just a sample of the range of possible activities. At the camp, disabled people can also exercise, lift weights, and go for excursions in the woods. Canoes have seatbacks for people with impaired trunk stability; tandem bikes permit blind individuals to cycle with sighted partners; and an asphalt path provides a good, all-weather hiking trail for mobility impaired persons.

Lisa Gwinner, an energetic university student in fine arts, planned her Vinland experience as a dry run for a job as a camp counselor. "Here, if I poop out in the middle of something, it's fine. I'm learning to pace myself. When I get to my job, I plan to work the same as everyone else."

Because Lisa has osteoarthritis, she is easily fatigued. When her joints become inflamed, she has chronic pain and loses functioning in her hips and knees. Her disability has worsened with time, and she has gone from using crutches to a wheelchair. Gwinner was always athletic and played wheelchair basketball for five years, but had to give it up when she lost the needed functioning in her arms.

"I'm finding out how I can stay physically fit," Gwinner explained. "Many of the participants here have disabilities where the harder they work their body, the stronger they get. It isn't the same with arthritis. If I work too hard and hurt my joints, it speeds the deterioration process. Certain forms of strenuous exercise, however, do not unduly tax my joints. That was a real revelation to me.

"A staff member in a wheelchair went through aerobics with me. She showed me how she adapted it to her disability and suggested how I could do it. I've also learned how to stretch my muscles effectively and do range of motion exercises."

Gwinner's discovery is consistent with the latest medical knowledge. Vinland's medical consultant, Keith W. Sehnert, M.D., explained that "All arthritis leads to greater disability if you don't maintain muscle strength. If you don't keep your hands strong and moving, they will curl up: You use it or lose it. The proper amount of exercise enhances the fluid in joints."

"For the first time," said Gwinner, "I've been able to go easy on strenuous activities and even fail without being made to feel like a total dropout. For example, canoeing is a love of mine. But I've always been concerned about overextending myself. I went canoeing the other day and was guiding the canoe—which tends to be stressful. I was doing it! That was a real thrill for me.

"People tend to think that disabled people are fragile. With arthritis, sometimes I feel like an old lady. Here I've found that I can still roughhouse and not hurt myself. It's a real relief.

"In this mixture of disabled and able-bodied people, I don't feel I stick out like a sore thumb. I don't feel so alone. It's also the first time I've met people with so many different disabilities. I was in wheelchair basketball with paraplegics, quadriplegics, and amputees. But people with cerebral palsy and brain injury don't play wheelchair sports. So I didn't know what to expect here. But we've shared different experiences and the group spirit is incredible.

"One day I got so tired, I couldn't get myself into bed. Lou, my roommate, had to help me. I felt bad because she has enough trouble without me. But then I realized that I would go out of my way to help someone else in the same situation—so why should I feel bad about taking help from Lou?"

Lou Tomes, a speech pathologist with muscular dystrophy, described the incident from her point of view. "I wanted to help her, yet I thought I might be incompetent. People help me a lot and I can't repay them adequately. It felt good to do something physically for someone. Besides, Lisa helps me to put on my braces and picks things off the floor that I can't reach."

Unlike Gwinner, Tomes was never athletic. Even as a child, she avoided physical activities. Her muscular dystrophy was diagnosed when she was 19. "In muscular dystrophy, muscle cells deteriorate. You feel limp and ragdollish. Sometimes there is no difference between putting all my strength in a muscle and not using it at all. For example, once I was trying to hang onto some ropes and I grasped with all my might—but I couldn't hold on.

"At the Vinland camp, I didn't succeed at everything, and I was scared to death when we went horseback riding. But I learned to have fun doing these sports, to feel control of my body, and to control my environment. I especially liked canoeing and swimming and I will continue doing them at home. For me, it has been a real achievement. This experience has rounded out my life."

The camp program which Tomes, Gwinner and the other disabled adults enjoyed was an initial project of the

Vinland National Center. According to Joan Saari, the Center's director and an able-bodied person, the concept of a national program on adaptive recreation comes from a rehabilitation center in Norway, the Beitostolen Health Sports Center. In fact, Norway contributed materially to the establishment of the Vinland program with a financial gift during the American bicentennial in 1976. With that gift, Vinland purchased 175 acres of rolling hills, marshes, wooded areas, and open spaces, including 2,000 feet of lakefront.

With grants from the federal government in 1979 and 1982, Vinland planned an expansive building program and has commenced constructing some facilities. At present, the program has 18 staff, half of whom are disabled.

From Norway, Vinland has borrowed the Beitostolen approach to health and sports, which emphasizes both the fun and the health aspects of adapted recreation. Having a positive impact on disabled persons later on in their lives is another important goal. Says Joan Saari, "We don't offer anything that isn't offered elsewhere. But we are the only place that has it all under one roof. We include physical fitness, health promotion, recreation, and lifestyle change. We take a holistic approach and want to affect a participant's later life."

At the Vinland camp, disabled persons experience an intensive program that begins each day at 7:30 a.m. After a family-style breakfast comes exercising and aerobics to loosen up, to stretch, to test limits—and to have fun. Then Center staff work individually with the disabled adults, assisting them learn how to best participate in sports, fitness routines, and body-building programs.

With the freedom to try everything, a disabled person can work at long-distance wheelchair travel, paddle a canoe to an island on the nearby lake, wrestle, do yoga, or lift weights. There are group activities, too—excursions, team sports, and "new games," which are noncompetitive contact routines which generate a lot of fun.

In one new game, for example, everyone forms two lines, each facing the other, with only a small distance between them. One person at a time leaves the group, closes his or her eyes, and then crawls between the two lines of people, who form a "jungle" of obstacles with arms, legs, bodies—and even mobility aids.

The Vinland program also has an interest in promoting employment in recreation. "We encourage disabled people," said Saari, "to go into recreation as a career. In Boston University, a master's program is being developed to train people to work in health and sports as a field. The program will include training in adapted recreation. Also, the field of recreation therapy is encouraging disabled people to get involved, and qualified disabled people can choose to work in camps, sports and athletic centers, and spas."

Behind these employment developments lies the expectation that disabled people will increasingly be consumers of sports and other recreation activities. In fact, there often seems to be a connection between, on the one hand, rehabilitation and independent living and, on the other hand, participating in vigorous leisure time pursuits. At the Vinland camp, one individual who illustrates this connection is Lynn Perrine. He plans to continue his exercise program at home because his ability to use his body has improved dramatically during the three-week camp session in the Minnesota wods.

Perrine has been in and out of hospitals because of a brain tumor. He sees double and has a poor sense of balance, and fluid accumulates in his brain. Perrine has a shunt to alleviate fluid pressure, but this shunt strains his entire body. When his heart beats faster to accommodate the stress, he must be careful not to overstrain himself. Twenty-seven years old, Perrine's income is from Disability Insurance, and before coming to Vinland he led a sedentary life, watching television, listening to his stereo, and patronizing a nearby theater. His only outdoor activity was riding in a sand buggy.

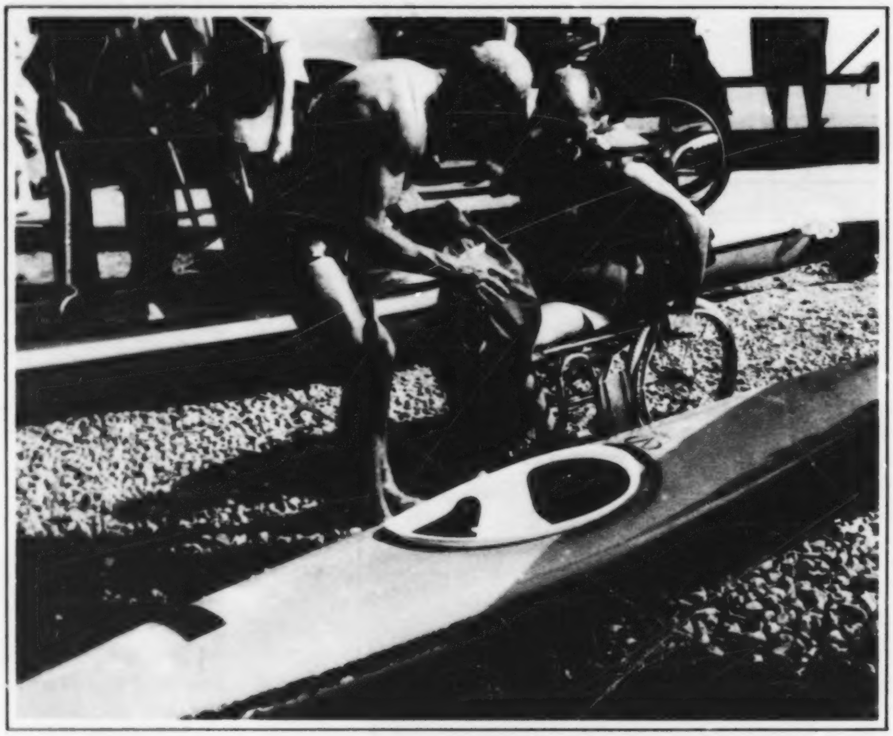
"At home I learned one exercise. Here there are 100, and all have helped. I do aerobic exercises and swim with fins and a kickboard. I couldn't do sit-ups, but I learned to do half sit-ups and other exercises to work my muscles. I've improved my abdominal muscles and built up muscles on my thighs and hips. Now I sit more comfortably and my balance is better.

"Before, I had poor circulation and easily got cold. By building up my heart and circulation, I am warmer, a lot warmer, and I've calmed down. I have the paperwork on all the exercises and I'll continue my program at home."

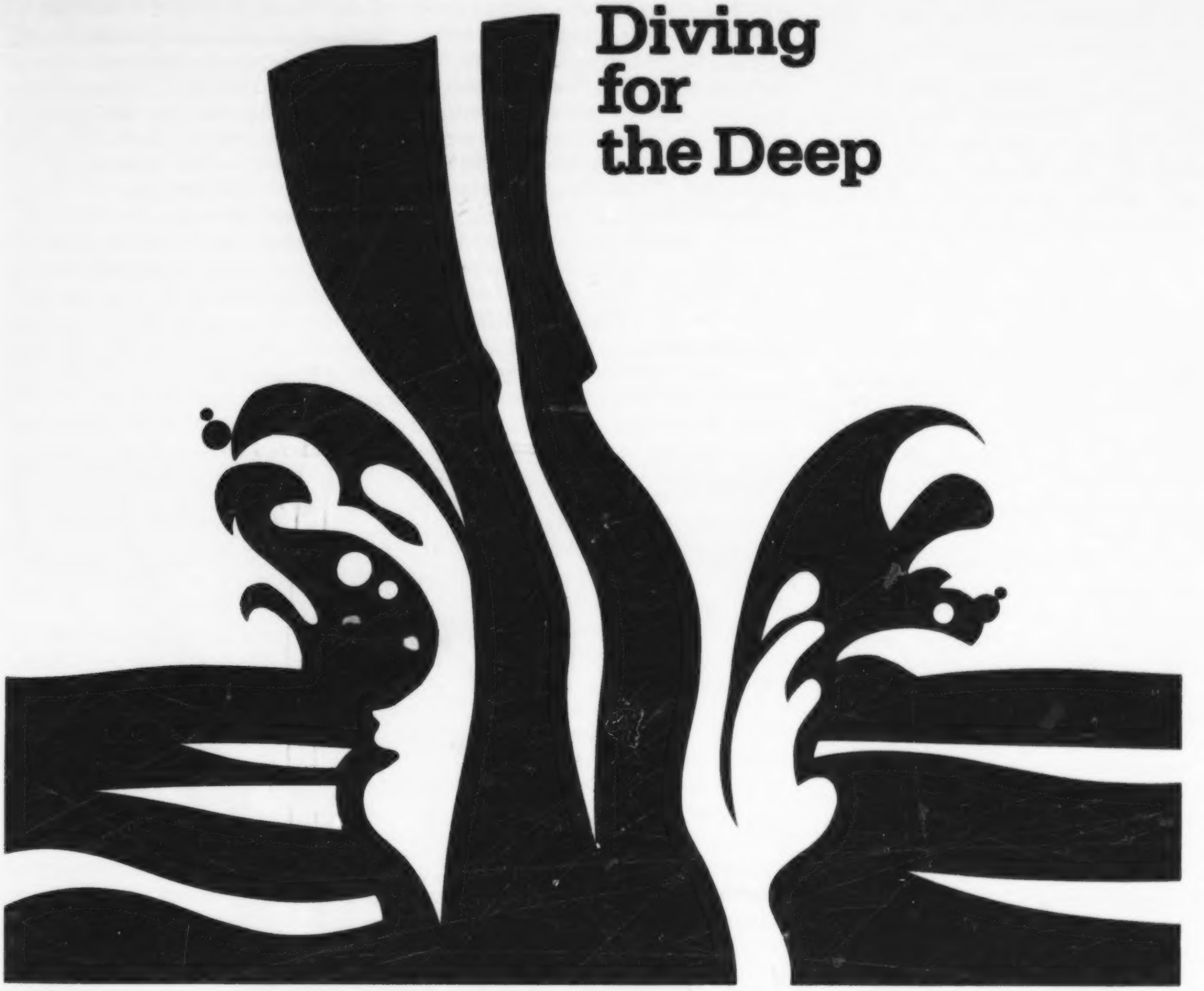
Health is the blessing that money cannot buy, said the English writer Izaak Walton in the 17th Century. To this remark we in the late 20th Century can add that disability should be no barrier to a healthy lifestyle. Doubtless, some disabled persons require periodic medical attention and have diseases which worsen with time. But all disabled persons have a capacity to participate in recreation. Sometimes procedures and equipment need adapting, but an impaired arm feels the thrill of pulling an oar. A person whose eyes do not see has a body that responds and strengthens when exerted.

—Dale Brown

Ms. Brown is on the Communications staff at the President's Committee.



Diving for the Deep



They have a diver's patch to wear on their clothes, a certificate of diving ability, and a YMCA card with the international access symbol printed on the reverse side. Eight handicapped persons living in or near Northern Virginia received these items in the mail after completing a scuba diving class sponsored by the Fairfax County Park Authority. Most had never dived before. As a special treat for themselves, the student divers and their instructors had traveled to Key West, Florida, to finish the course with open water diving on the reef surrounding the Florida Keys.

The experiences two of the students had off Key West well illustrate the challenges and rewards of diving. One of the students was Judy Munske. The other was Mark Sakaley.

Reflecting on her five days in Key West, Munske remembers the last dive, on a Monday, as the best of all. Six miles from land, the ocean was calm and the water below the surface undiluted with sand. Munske's expectations that day were buoyant. Before entering the water, she felt "all primed and excited—a feeling that this dive was going to be a good one. I had the right mental attitude—not anxious, but keyed. I was not even one bit frightened, as had previously been the case during diving in open water and in swimming pools."

WORKING AT HAVING FUN

On the morning of her last dive, Munske had behind her over 36 hours of instruction from the Fairfax County program. Accomplishing this had meant much work. On television programs actors typically slip into wet suits, tanks and masks, and in a splash emerse themselves in underwater adventure. In reality, diving—and especially learning to dive—can be tedious and somewhat exhausting.

For Munske it had been many hours of classroom instruction, of handling unfamiliar and often bulky equipment, and of swimming in pools while learning and practicing diving procedures.

She learned, for instance, how to clear her mask of water while diving; how two divers can share one breathing apparatus in emergencies; and how to communicate to colleagues while underwater. All the while she experimented with different ways of adapting diving procedures and equipment to her disability and in turn

adapting her physical abilities to the limited means for support underwater.

All this was no simple task for Munske, who is 52, leads a retired life, and has been previously uninvolved with sports. She is a post-polio person and stands up only briefly and with support. Her disability restricts her breathing capacity and her overall physical strength is moderate. Never had she conceived that she would be scuba diving. In fact, her initial participation in the class had been against her better judgment.

"I joined the recreation class just to take the first lessons and learn snorkling, which I wanted to do in my backyard pool. But the good vibes among the students and instructors encouraged me to continue with more class sessions. Another incentive to continue was an unexpected, but pleasing loss of some excess body weight resulting from the diving activities.

"I felt real fear and queasiness about emersing myself in dark water during the early class sessions. Sometimes I felt close to panic. By the last swimming pool dive, it was gone. It returned with my first dive at Key West, but on Monday's dive I knew I would do well."

On that day, Munske, at the stern of the 48-foot dive boat, awaited her turn to dive while wearing all of her gear: Long-sleeved wet suit jacket, mask and snorkle, a harness containing an inflatable vest and a 50-poud tank of air, and an air regulator with several air hoses.

Munske also wore jeans, rubber-soled bedroom slippers, socks, and for her hands a pair of gardening gloves. Finally, about her hips she wore 20 pounds of lead weight. Despite the heaviness of the equipment, she had no sense of being encased.

Most of the disabled divers lowered themselves into the water before strapping on their air tanks. Because she could stand with support, Munske entered differently. With all her gear on, she first lowered herself over the boat railing and stood on a small platform behind the boat's stern and just above the water. Standing between two able-bodied helpers (her primary and secondary instructors), Munske grabbed their necks, while the two helpers held her legs—and jumped into the water.

THE WORLD UNDERWATER

For a few minutes Munske bobbed on the water's surface, completing final preparation for her dive and breathing through a snorkle in order to conserve her tanked air. She checked all her equipment and defogged her mask. With her left hand she worked two buttons on a hose connecting her air tank to the inflatable vest. Adding air into the vest helped make her buoyant; letting air out helped her sink deeper. During class sessions, Munske had experimented with different types of buttons until she found a system safe for her to manipulate reliably while keeping the hose held above her head.

Finally, she began her hour-long dive—the last one on which she would be considered a student. While deflating her vest, she carefully worked her way along an anchor line to the reef's surface, about 20 feet down.

Most divers descend headfirst, but Munske preferred a sitting posture. Because her body has great buoyancy (which was the reason she wore considerable lead weighting), Munske needed some help to keep her legs beneath her. Her two instructors swam nearby and gave her occasional assistance.

After pausing on the reef for a one-minute rest, she signaled she was ready to swim. Her primary instructor helped roll Munske on her stomach and she was on her own to explore. There was much light on the reef's floor and the relatively calm water permitted 10 to 15 feet of clear vision. Munske remembers the reef having a rugged terrain, with occasional and sometimes abrupt 10-foot changes in level. To negotiate these changes, Munske resorted to altering the air pressure in her vest, and this assisted her limited arm strength to swim her body to greater or lesser depths.

Around her were strangely formed coral, with some hump-like incrustations growing 10 to 20 feet in circumference. The coral had many dark recesses, and swimming next to one small sea cave, Munske's flashlight revealed fish lurking deep within. Out in the open water other fish swam about, particularly angel fish with blue and bright yellow stripes on pale translucent bodies. Many of the fish, some up to a foot long, swam in schools coming within 10 feet of Munske.

On the ocean bottom were huge lobsters and at one location an unrecognizable life form sitting perfectly still. Everywhere Munske saw miniature "elfin" gardens of Caribbean plant life. One type of white and red flowerette would close up and withdraw its petals at the approach of Munske's hand.

Periodically, she paused to either stand, kneel or sit on the reef before exploring further. No sunken wrecks or corroded doubloons were discovered on the reef, but Munske did come across an underwater gulley that was surprisingly straight and regular (25 feet wide and four feet deep) and had bright white sand at the bottom.

Halfway through the hour-long dive, Munske paused to expel sea water that was seeping under her mask and burning her eyes. Other than that adjustment, no equipment problems nor misadventure of any kind occurred before she completed her dive by carefully reascending the anchor line to the water's surface.

MARK SAKALEY

Having entered the water after Munske, Mark Sakaley continued scuba diving while Munske was returning to the boat. Down on the reef he was still excited about the ability to "see under the ocean."

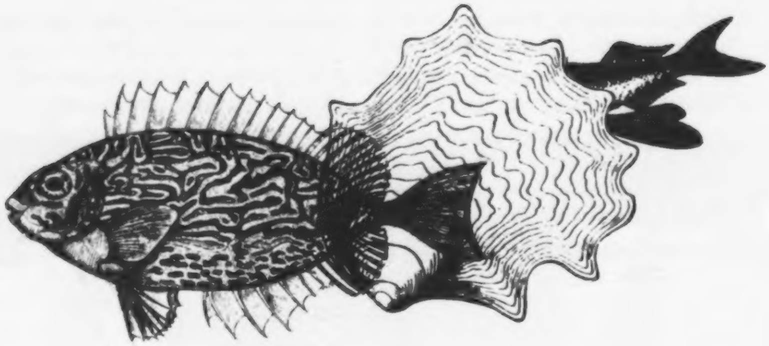
Everywhere there was sea grass and growing coral. Some coral took a fan shape; some grew like reindeer antlers; and some (the "humps" that impressed Munske) grew in large clumps and mounds. Between the mounds was flat ocean floor. Pausing on the floor and looking up, Sakaley saw the terrain as a "miniature mountain range with round peaks."

During his dive, Sakaley saw many fish, lobsters, a few sting rays, and sea urchins. Often he simply stopped swimming, settled down on the reef, and watched the sea life pass by him. One of his two instructors once cut open a sea urchin and let the carcass attract many small fish.

Later, Sakaley discovered how fish go crazy when presented with their own image in a mirror held by an instructor. However, this demonstration could not be repeated afterwards as the instructor, writing on a slate that divers use to communicate, wrote that he had lost the mirror while swimming.

While Sakaley swam, one instructor stayed in front of him and the other lagged behind. Nevertheless, because his mask restricted his peripheral vision, Sakaley rarely noticed the person behind him. Only occasionally did an instructor lend him physical assistance, and more often it was simply to point him toward an interesting sight. Sometimes Sakaley needed a hand to maintain good trim while swimming, but he entered the water with no concern about his ability to scuba dive and nothing occurred to shake that confidence.

Sakaley has a spinal cord injury and moderate strength and dexterity in



hands and fingers. Like Munske, his disability also impairs his breathing capacity. To move about underwater, Sakaley used a modified breast stroke and his inactive legs presented no problems when he swam. In general he did not find impaired strength much of a disadvantage. "Underwater," he states, "slow movements are better than quick—you generate less counter current when you swim deliberately. The best method is to flow with the water and not work against it."

In another way, temporary submission to the aquatic world can heighten the experience of open water diving. Breathing tanked air through a mouthpiece surrounds a diver with the sound of his own respiration. According to Sakaley, it is a pleasant alternation of "clean, crisp inhale and bubbly exhale." But when a diver dispenses with breathing for a short while, says Sakaley, "then you hear other sounds, the clinking and crackling sounds of fish communicating to each other. It is similar in sound to Rice Krispies in a cereal bowl."

Because he does not stand at all, Sakaley entered the water from a sitting position by rolling off the small platform at the stern of the dive boat. Before doing this, he donned a long-sleeved wet suit jacket; diving mitts with curved plastic paddles inside to keep his fist open for better swimming; diving booties on his feet; two separate air regulators and hoses; and a mask and "shotgun" snorkle.

This snorkle, not often used among divers, has a valve that keeps the snorkle from filling with water while a diver is bobbing on the surface, so less breath is required to clear the snorkle of water that does enter. Sakaley also wore long pants and carried no lead weight, although on reflection he feels that a little weight on his chest would have helped him swim better in salt water, which has greater buoyancy than fresh.

While sitting on the dive platform, Sakaley perched on a three-inch, ring-shaped life vest of hard foam. This cushion, he felt, helped him keep his balance as the dive boat rolled up and down on the small surface waves. When everything was ready, Sakaley rolled forward into the open water and the arms of his two instructors, who then assisted him strap on his air tank and buoyancy jacket.

Sakaley used an arrangement known as an "atpack." Instead of the well-known separate tank and horse collar buoyancy jacket, the atpack is a single unit which does the work of both. In addition, the atpack, by putting a pocket of air around the tank and on the back of the wearer, eliminates the need for some lead weighting around the diver's waist.

Finally, when the wearer is on the surface of the water, he or she can easily decide to float either face up or down by altering the amount of air in the buoyancy control part of the atpack unit. The alterations can be done easily by a person with a limited range of arm motion since the atpack does not have a regulating valve that must be held above the wearer's head.

At the start of his final dive off Key West, Sakaley used his atpack to keep him vertical in the water with his head just above the surface. Slowly he deflated his buoyancy control until he just began to sink and then he worked his way down an anchored line, much like Munske before him, in a sitting posture.

Also, like Munske, Sakaley altered his buoyancy underwater to help him swim from one depth to another. Other student divers who had better arm strength simply relied on that strength to change depth. Munske's and Sakaley's method is not typical for scuba divers who want to conserve their tanked air supply and remain underwater for as long as possible. Still, Sakaley did not feel his dive was appreciably less in duration than the other students'.

Nor did he feel any less exuberant after returning to the deck of the boat. For him as for the others, the dive was pleasantly strenuous and greatly fascinating. "There is so much to see underwater," he asserts, "you can use up a whole tank of air while looking at the marine life in one square yard."

LEARNING HOW TO LEARN

What Munske, Sakaley, and the other disabled persons from Virginia did was an uncommon accomplishment. Not many disabled persons have yet explored the sport of scuba diving, and very few with Munske's and Sakaley's degree of impairment.

When the class first began, says instructor Carol Beaulieu of the Fairfax County Park Authority, no manual or body of professional knowledge existed on adapting the sport for disabled students. In fact, she remembers, the National Diving Association was initially unsure about the safety of the sport for severely disabled persons and the appropriate standards for certification. Beaulieu went forward with the class and structured it no differently than other scuba courses she has taught.

As it turned out, the disabled students received the same training and met the same standards for certification as do all novice divers. The class covered all the typical material and procedures and took no longer to complete then usual. Still, during the course, much was learned about adapting teaching practices, using different types and arrangements of equipment, and giving assistance to a disabled diver—depending on his or her physical abilities.

Many of the safety precautions in diving and much of the course content and practice diving in the Fairfax County class concerned assuring the ability to breathe underwater. Breathing is the ever-critical first priority concern for divers. One factor which complicates underwater breathing is the increased pressure on a diver's body as it penetrates to lower depths.

Yet, according to Munske, breathing in deeper water is actually less difficult than in shallow water. Once down on the reef, she did not find her impaired breathing capacity a handicap. In fact, quite the contrary. Because her breathing is normally shallow, Munske used up her tank air less quickly than most able-bodied persons. This is an advantage in that it allows her to dive longer than most people—but at no greater cost in air supply.

Regarding the added weight of the water on her body in general, Munske recalls that at first, it was noticeable and required her to make extra exertion. But later, her body seemed to adjust to this new environment. Perhaps some of the discomfort was due to early anxiety about diving—apprehensions which disappeared entirely by the final dive.

With Sakaley, one interesting dressing procedure was developed during Beaulieu's diving course. It involved the use of plastic produce bags from a supermarket. Because of the snug fit of a wet suit jacket and diving gloves and booties—and their reduced pliability when dry—Sakaley initially had great difficulty in suiting up for practice dives. However, with small plastic bags over his hands and feet, he eliminated much of this difficulty and reduced his dressing time.

In retrospect, Munske describes the experience of learning to scuba dive and actually doing it as "good mental exercise." New knowledge had to be absorbed, and the need to carefully prepare for and plan dives was paramount. Finally, there was the mental feat of conquering fear, a fear which Munske compares to the long ago experience of discontinuing reliance on an iron lung following her polio.

At the end of her last dive in Key West, Munske felt "all aglow—on high" about her accomplishment. "Even talking about it now brings excitement," she asserts. "My diving certification is the best award of my life."

Sakaley also continues to be enthusiastic about his diving, now several months behind him. Pleasant adventure and the freedom to control himself in a totally new environment made the experience exhilarating. In the future, he expects to do something that he first performed during class practice and repeated off Key West—turn somersaults underwater, free of the limitations of gravity and his disability.

—Robert Gorski

For further information on the scuba diving program that included handicapped persons in Fairfax County, Virginia, contact Carol Beaulieu, Aquatic Program Coordinator, Fairfax County Park Authority. Other groups are also pioneering this sport for disabled persons. In Canada, a group of disabled persons have made a 30-minute film about their program. The film is called "Free Dive," and is distributed by Filmmaker's Library, 133 East 58th Street, New York, NY 10022.

In California, the Handicapped Scuba Association teaches diving and arranges excursions. Contact person for the Association is Jim Gatacre, 1104 El Prado, San Clemente, CA 92672. A brief article about the association appeared in the July 1982 issue of "Mainstream," and that magazine's address is 861 Sixth Ave., Suite 610, San Diego, CA 92101.

Regarding diving and the blind, "Visual Impairment and Blindness," May 1982, had an article—"Scuba Diving for Blind and Visually Impaired People"—written by Anthony R. Candela, whose address is 377 North Broadway, Yonkers, NY 10701.

Exercise Is for Everyone

I had been kissing my Maori Tiki charm a lot in June of 1976. Good luck materialized as I discovered the Adaptive Physical Education Program at the College of Marin.

I've had post-encephalitic cerebral palsy since I was 13, and I was sitting around the house reading and writing and going to pot physically. Like many disabled people, I knew I should exercise more. But the boredom of exercising alone and my lack of any equipment kept me sedentary. The road to physical deterioration is paved with good intentions.

I was becoming a mere observer of life passing by me, rather than an active participant. In this half-way zonked-out situation, I was feeling more and more loggy, sense-dulled, mentally numb; more interested in the world of books, television and newsmagazines than what was going on in my own life.

Then that lucky June day I asked the high school boy who mowed our lawn to push me down to the College of Marin campus, just to get out of the house and look around. While on campus, I went to the physical education program and asked the head of the department if there was any way I could use the equipment. He told me I should see Laurie Lanham, "She has just started a class for people with disabilities." It was to change my life.

Lanham turned out to be a genial woman who received most of her training in Veterans' Administration hospitals. She has credentials in special education, as well as being a Registered Recreation Therapist and a Certified Rehabilitation Therapist. A year later I learned that she is herself disabled with multiple sclerosis, and had been so for years. Lanham was strong physically and mentally, and what she was developing at the College of Marin was something truly unique.

To some, it might seem a bit strange to talk of physical fitness and disability in the same breath. But what I mean by physical fitness is making the most of what I have, trying to improve my body in every way I can. By gaining in strength and endurance, I keep my waistline within bounds, and my muscles stretched, toned and comfortably tired to promote good sleep.

When the adapted P.E. class was in its infancy, we had only the pool, one Universal gym set and some mats. There were just six students. Today, we have a larger Universal gym, two body machines, a rowing machine, two stationary bikes and a hydra-exerciser, plus a lot of pulley-type weights and a lot more mats. We still have access to the college pool. Our number has grown to almost 70, with a long waiting list. (A small group of ancillary classes have been developed around adaptive P.E., including speech for the neurologically disabled, rhythm exercise, tai chi, and photography for disabled people.)

To get into the class requires the approval of a physician and an informal assessment by Lanham of the prospective student's disabilities and attitudes. Self-motivation is one of the attitudes for which she looks. This is not physical therapy, where something is done to you on the prescription of a physician. This is physical education, and you must set your own goals and follow through.

The ages of the students range from 18 to 94, covering a wide spectrum of neurological disorders, severe physical trauma, arthritis, blindness, deafness, and cardiac problems. The class is limited to those with physical disabilities, being unequipped to handle mentally disabled students or those with serious learning disabilities.

The program has four interlocking parts: weight training for strength and endurance; yoga for stretching, relaxation and mental peace; the pool for swimming, weightless walking and endurance; and woven throughout the program is socialization.

One of my favorite exercises involves using a Universal gym leg press. With this device I used to fantasize that I was a small Arnold Schwartzneger because I have strong legs and could push more than twice my own weight. But after a while, Lanham took me off it for fear I was becoming muscle-bound. Now, I use it about once every two weeks just to keep my muscle tone. However, I do use most of the weightroom apparatus an hour a day, four days a week.

After the weights comes yoga. It was several months ago when Malini Schuyten first came to demonstrate yoga to the class, adapting it to our disabilities. We fell in love with her and she stayed on as a volunteer, teaching us the joys of belly-breathing and the benefits of a midday mini-vacation, along with more rigorous bodily discipline.

Before I got cerebral palsy, I loved the water and was a fair swimmer. So when Lanham spoke with her contagious enthusiasm about getting me in the college pool, I looked forward to it with eagerness. However, to my chagrin, I found I swam like a rock. As a swimmer, I was the Mark Spitz of drowning. I lacked the necessary coordination and breath control that I had 40 years ago, and I had too much rigid muscle to just float.

However, the pool holds a special fascination for me. My disability makes it impossible for me to walk—on dry land. But the buoyancy of the water makes my body lighter and I can walk around the entire pool unaided, except for a companion to retrieve me from the bottom should I lose my balance and fall. On a warm day, if I'm in good form, I can walk around the pool eight or nine times. Moving against the resistance of the water, the exercise is considerable. So is the satisfaction.

Lanham has always emphasized the importance of the social side of adaptive P.E. "There are so many disabled peo-

Let the students have fun, be innovative, and discover their own limits.

ple who don't get an opportunity to get out. They don't get any exercise and they don't get much chance to meet people and socialize like the rest of us," she says.

"For people who face a disability for a long time, or for the rest of their lives, there's physical therapy of course. But those who aren't just temporarily disabled often want something more than a hospital atmosphere. A lot of our students like the fact that they can meet and become friends with members of the opposite sex."

While the class is fun and Lanham has a great sense of humor, she puts her VA rehabilitation training to serious use. Some people have come into her class nearly hopeless vegetables in wheelchairs and are today walking and leading independent lives. Her encouragement reinforced my determination to get an electric wheelchair, though many doomsayers were telling me that I could never drive the thing and that I was virtually contemplating suicide by even considering it.

The first time I got in one, I practically wiped out a nurse's station in the Kentfield Medical Hospital. Now, I have so mastered "my Cadillac," I drive it the half-mile to the college and back and scarcely give it a thought. Up hill and down, on sidewalks, on roads, on bike trails, I experience the exhilaration of independence.

There are two ways in which adaptive P.E. programs are handled in California community colleges. One is patterned after hospital life, with doctors and physical therapists making the decisions, prescribing the exercises, and charting the students' progress with diagnostic check-ups.

The other is the way Lanham does it, letting the students have fun, be innovative, and discover their own limits. The two contending schools of thought remind me somewhat of rule-bound Confucianism versus go-with-nature Taoism. It is probably not coincidental that as a child in Hawaii, Lanham often visited a Taoist temple. "It was lots more fun," she says, comparing it to her family's regular church.

Although it may not be possible to find more Laurie Lanhams, it does seem to me that the adaptive P.E. program at the College of Marin can and should be imitated elsewhere. At a time when huge numbers of nondisabled Americans are working up a frenzy of perspiration in gyms, on jogging trails and bike paths, in pools, and on courts and playing fields, it is a bit sad that the opportunities for healthful exercise are so limited for many disabled people.

The idea that a healthy mind and a healthy body go together is as old as ancient Greece. I want to be as alert as I can with what I have. While I don't always succeed, I do have the satisfaction of knowing I am trying.

—George Barker

Mr. Barker is a free-lance writer.

Opening Up Opportunities

Adaptive Equipment for Recreation

Recreation is something which nearly everyone wants to do—and even feels it important to do. Of late, recreation involving physical exertion has become almost a craze for legions of sweaty, racket ball wielding, weekend-camping, sun-tanned people.

Aside from simple jogging, most every form of physical recreation involves special equipment. Tennis rackets, 10-speed bikes, hiking boots, sail boats and water skis. These are a few examples from an endless list of products that help people obtain physical excitement, firmer bodies, social interaction, enhanced egos—and refreshment from the weekly work pace.

Apparently, to enjoy life many people must be physically active after hours and on weekends. Recreation is being exalted and is helping define the individual—you are how you recreate.

For disabled people, the thrill of exertion and the benefits of recreation are just as important. And obtainable in many instances, given the right equipment. Indeed, equipment designed soley for disabled recreation enthusiasts and standard products modified for use by disabled people are increasing (on a smaller scale) just as products for the general public have proliferated.

Beeping baseballs for blind persons, sports wheelchairs with angled drive wheels, and ski poles for leg amputees are no longer novelties. They were the precursors of adaptive equipment now on the market for almost every recreational endeavor. This article describes four examples of recreation equipment, designed relatively recently and not yet well known.

A PLACE FOR PLAYING

"That's what the *adult* recreation area used to look like," said Deborah Hays Sanford, pointing my attention to a far corner of the grounds. I saw well-weathered, steel construction swing sets, slides, and climbing mazes, "all of them," Hays Sanford underscored, "arranged in a simple straight line."

In contrast, we stood inside an octagonal "tree fort" made of lumber and perched about five feet above ground. To reach the fort we had ascended a zigzag, wheelchair accessible, cement ramp and then descended a short wooden walkway. Before reaching the zigzag ramp, I had rolled my wheelchair through a section of large cement pipe lying on its side on the ground.

These are a few elements in an elaborate, but cozy outdoor recreation area designed by Hays Sanford and others at the Center for Rehabilitation Technology at the Georgia Institute of Technology. The recreation area is located at the Georgia Retardation Center in Atlanta, a residential program serving over 350 retarded persons, of whom two-thirds are adults.

"The project to design this area began about four years ago when the Retardation Center received funding to purchase recreation equipment for mentally retarded adults," explained Hays Sanford. The center became stymied at that point—there was no equipment on any market appropriate for retarded adults.

"For one thing, a larger scale in the size of the equipment was needed. For another thing, since the adults have 20 to 40 years life experience, many of the concepts typical of child recreation are not diverting and stimulating."

What has been constructed at the Retardation Center is the result of a long process in architectural design for the interests and abilities of the center's residents. Not only is the recreation area fun, but also it has a high degree of sensory stimulation and is physically challenging because of its landscaping, variety of perspectives, and diversity of materials.

Part of the design process involved industrial design students at the College of Architecture creating recreational products for the Retardation Center. This was a challenge, remembers Hays Sanford, "much different than simply designing for wheelchair accessibility. Students couldn't resort to guidelines; they had to understand the consumer needs of mentally retarded adults by first meeting them and then analyzing their interests and capabilities. About half the students could not respond with well-designed products. But the other half did."

Besides the tree fort and its complex approach path, other design elements in the center's recreation layout include an area of stepping stones, a cargo rope climb, colored banners, and wind chimes. Automobile tires are suspended in a circle from an open framework of posts and planks.

From another open framework, chains and ropes suspend a wheelchair accessible platform which can easily be swung and rocked by a person sitting on the platform. The layout clusters the recreation facility in an irregular circle about a quarter of an acre in size.

What I saw at the retardation center was not yet complete—although usable by adult residents. But during the design and construction period, Hays Sanford completed a smaller and less elaborate recreation area for a sheltered workshop in Atlanta. At the DeKalb Training Center, employees have access to a wheelchair swing, a wide slide, and climbing steps, among other equipment. The design features attention to adult scale and a variety of textured surfaces, and it provides users with hidden recesses and changes in elevation and perspective.

In observing retarded adults use the equipment she helped design, Hays Sanford, who has a background in serving retarded people, sees gratifying signs. Even individuals who normally show little interest in interacting with their environment are often motivated to look closely at the elements of the recreation area and touch what they can reach.

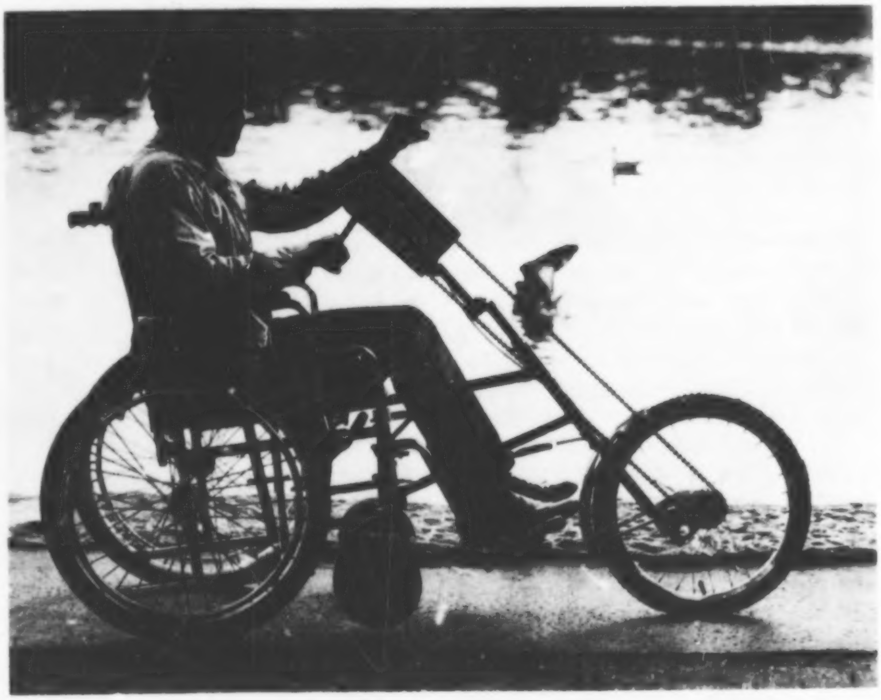
Among adults with greater mobility and motivation, Hays Sanford has noticed much social interaction. People cluster in groups and talk to each other. They help each other figure out how to use the equipment and even make up group games.

Cycling In A Chair

"Davis, California, is the bike capital of the world," says Douglas Emerick, "so there are many well-constructed bike paths, and the streets have easy slopes for drainage." Although constructed with bicycling in mind, the design of Davis's roads and paths are good for another type of cycling—hand cycling in a wheelchair.

For the past five months Emerick has been cycling by using a device attached to his wheelchair. The Unicycle weighs 30 pounds and consists of a hand-cranked drive wheel mounted on a frame that attaches to the undercarriage of Emerick's wheelchair. When connected, the Unicycle lifts the front casters of Emerick's chair off the ground, and he sits back at a slight tilt in a three-wheeled vehicle, with the cranking mechanism at chest level.

With an incomplete spinal cord injury, Emerick uses braces and crutches to walk. But "when it comes to recreation, I am a wheelchair user," he says. Since previously he was only an intermittent



wheelchair user, "My arms are not as strong as many people who use chairs regularly." Currently his cycling range is about 2½ miles and his speed is comparable to "a pleasantly slow bike speed." But with the Unicycle "enlivening my wheelchair use" he expects to increase his range as well as pick up his speed to half of a good bicycling rate.

At that point, it will be practical for him to commute to and from the University of California at Davis, where he is a senior. During the school year, Emerick will cycle to campus, detach his Unicycle and lock it to a bike rack, and then roll into class.

Still, the Unicycle is not a perfect device. For one thing, the wind resistance of a hand-cycled wheelchair is considerable, and reduces the rider's speed when going into the wind (although, of course, in going with the wind the opposite is true). Turns must always be made wide when traveling at a good rate or tipping over occurs.

The greatest limitation of the Unicycle is the inability to handle slopes. The device has only three options in gear ratios (most bicycles have anywhere from 8 to 15 gears), and there is very little weight carried on the front wheel, where the hand-cranked power is applied. As a result, Emerick "sticks to basically flat terrain."

Emerick finds the Unicycle handles well on dirt and on gravel (if not very loose)—but such roadways reduce his speed. For people who might be significantly weak in one arm, Emerick does not see any problem in handling the Unicycle. Since the driver puts all his or her force into one drive wheel, the Unicycle can actually handle easier than the standard wheelchair which has two drive wheels—one for each hand.

Several companies do manufacture hand-cranked tricycles which are faster and handle slopes and turns better than the Unicycle. But the cost of such equipment, naturally, is considerably more than the Unicycle's $325. Also the other devices are self-contained vehicles and not attachments to a wheelchair.

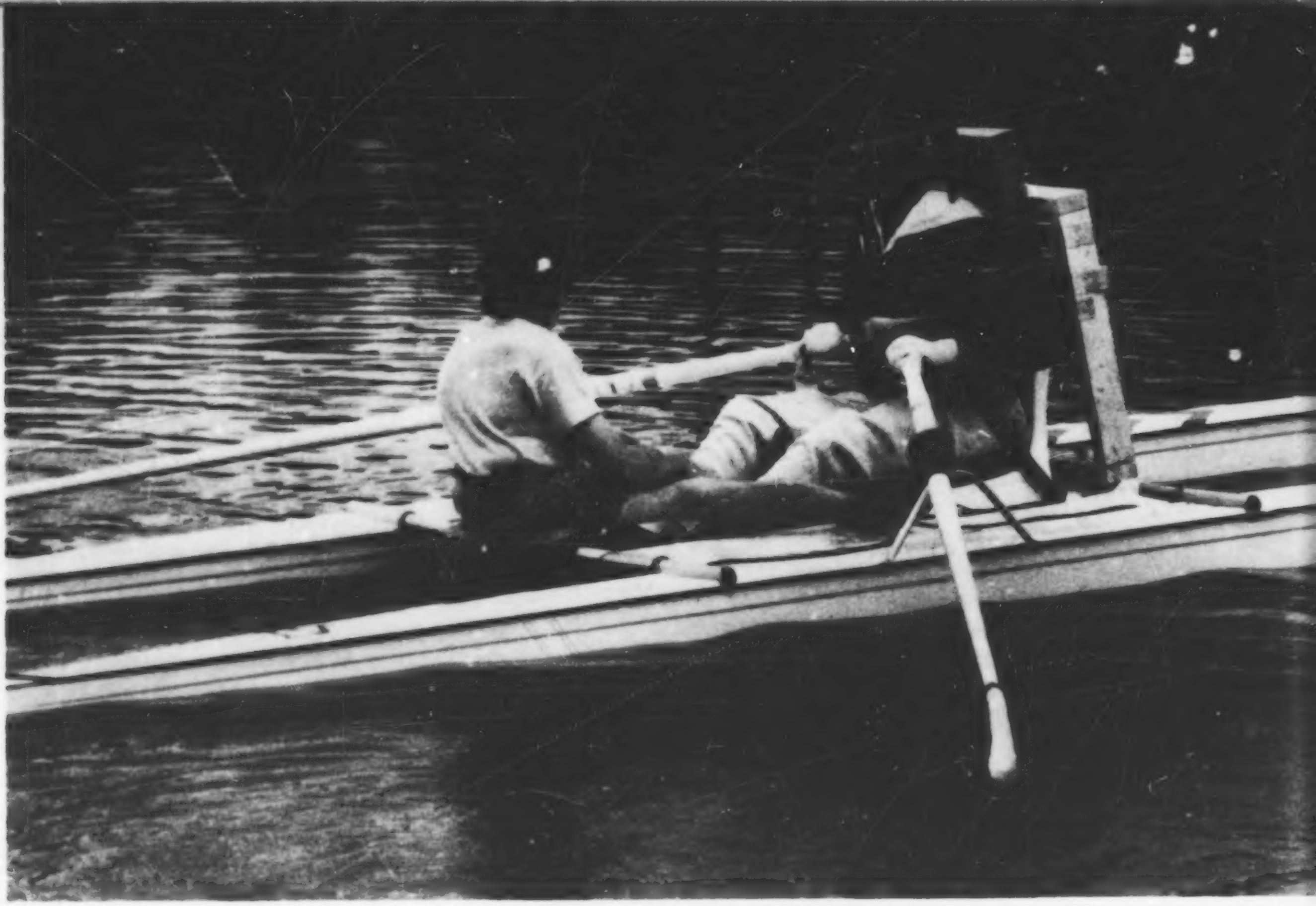
In another California city with flat terrain, San Jose, Venus Mullins uses a Unicycle for four- to five-mile recreation trips. He also does brief shopping errands to the store about a mile from home. Mullins has two daughters, aged nine and ten, and can cycle with them at a normal bike speed since his arms are relatively strong. Nevertheless, above two miles per hour, Mullins reports that the Unicycle does get shaky and the steering wobbles.

Despite his strength, Mullins takes turns either wide or at reduced speed. He does negotiate driveways and small hills—although it is, he says, "pretty difficult." But he has ridden on ramps where the slopes are the recommended standard for wheelchair accessibility and found them easy to take.

The ability to easily disconnect the Unicycle from his wheelchair is a real advantage, according to Mullins. Yet he cautions that attaching the device is not a simple task. It requires coordination and some trunk stability to lean forward, reach down, and fit the frame of the Unicycle under the wheechair.

Public reaction to wheelchair cycling has been good. Blatant staring has been few and far between, and several able-bodied people have questioned Mullins about getting Unicycles for disabled friends and family members.

In the city of Davis, Emerick has found children to be very inquisitive and adults to be thoughtful—but no one minds Emerick using his wheelchair on bike paths. There has even been a minor economic advantage in using the Unicycle. Since Emerick's "vehicle" is not technically a bicycle, the city licensing office says that he need not purchase a bicycle license in order to use the streets and bike paths in Davis.



ROWCATTING ON A RIVER

Like a dragonfly skimming over water, I practically glided across the Huron River in Ann Arbor, Michigan. My "craft" was a seat fixed astride two thin, eight-foot long hulls—like a little catamaran. Instead of a sail, a set of rowing oars got me through the water. There was no bow, stern, or gunwale—just me sitting on a blue river and stroking easily.

My rowing scull was no exotic device developed just for disabled users. It was a manufactured piece of equipment called a "rowcat," developed several years ago for competitive rowers to develop their skills in individual practice. Two years ago, rowcats, with a little modification, were found to be convenient recreation for many mobility impaired persons.

Because the rowcat has no side walls and is so light, it can easily be pulled ashore; transferring to the craft from a wheelchair or from crutches is relatively simple. Since the twin hulls of the craft are extremely slender and only break water to a depth of a few inches, little muscle power is required to propel the rowcat.

To modify the rowcat for disabled persons, three changes are made. First, the seat is cushioned and fitted with hip and chest straps. Second, the seat is made stationary and the front of the platform on which the rower sits is lowered to allow more clearance for legs and knees. Third, the competition-style oarlocks are replaced with ones that reduce unintended rotation of the oars, which interferes with the speed and control of the rowcat.

Modified rowcats are in use at several locations across the nation. One craft is in Ann Arbor because of Doug Herlan. Herlan works in the affirmative action office at the University of Michigan, he is a rowing instructor and a disabled person. Because he knows firsthand that rowing is an enjoyable sport with physical and mental benefits for those who participate, Herlan wants his community to purchase one of the $2,000 rowcats and house it for use by disabled people in a city-owned canoeing and rowing dock on the Huron River.

It's a good investment, Herlan feels, because so many disabled people can use the rowcat. The afternoon I tried it on the Huron River, one person with multiple sclerosis and another with quadriplegia also rowed successfully. The amount of exertion required is surprisingly little, and various ways of securing hands to the oar handles have been developed for persons with impaired grasp.

Rowcatting does not have to be a solitary endeavor. Some rowcats are designed for two people to row simultaneously. Even a single seat rowcat has enough room and buoyancy for a second person to accompany the rower. During my afternoon at the Huron River, one disabled father went rowing with his young son; another person went with a girl friend.

"It was just glorious to be out doing something under my own power," says Tom Komar about his first experience with the rowcat. "It was possibly the first true recreation that I've had since my injury. After I was sure of the safety of it, I got pretty elated. There's a feeling of freedom on the river—a feeling of independence. With other activities, it takes a lot of interaction with other people; doing this on my own, the feeling is just unbelievable."

I, too, know what Komar experienced.

Although one part of my mind knows that Doug Herlan accompanied me when I tried out the rowcat, I really don't remember him actually being there. Instead I only recall propelling myself through water in a craft that was sleek and graceful—a craft which Herlan says often gets envious looks from other rowers and canoeists.

MY ACCESSIBLE LEAN-TO

At Calvin Coolidge State Park in the middle of Vermont, mobility impaired people have a unique opportunity to enjoy the out-of-doors. On a quiet mountain side and amid green trees in the summer, the park has a score of lean-tos to rent to campers and visitors. One of the lean-tos, and one with a good view of sunsets and the surrounding mountains, has been modified for disabled persons.

The standard lean-to at the park is a wooden shack with one open side and a roof that slopes to the floor boards. The lean-tos sit atop wooden logs about a foot above ground. The accessible lean-to has a well-constructed—and railed—wooden walkway that starts from the parking area and runs around the lean-to to its open side. In front and at ground level is a waist-high barbecue pit and a picnic table. Nearby (but uphill) is the park's bathroom and shower facility—also accessible.

Elsewhere the park has flat areas for pitching tents and parking campers. A wooden ramp bridges a small gulley in front of a picnic ground. A children's playground is on flat terrain and some of the park trails are wide enough and level enough (although rough in terrain) for wheelchairs. All in all, Calvin Coolidge State Park is a pleasant and accessible out-of-the-way spot for a summer outing.

One remark about rowcatting, from the president of the United States Rowing Association, aptly states the importance of adaptive recreation equipment for disabled persons. "There's a syndrome among instructors," says Chris Blackwell, "to think that disabled people have to be approached as special cases. Whereas that may be true in regard to equipment, when it comes to the activity per se, disabled persons appreciate being put in the same situation as non-disabled participants."

Separate activities may be best with competitive sports like basketball and track. Other than that, recreation professionals and planners should hear clearly that disabled people want recreation along with and among all other people. Sometimes the right adaptive equipment makes that goal "accessible."

—Robert Gorski

Some material for this article comes from a University of Michigan news release dated July 14, 1982.

On the Eastern Shore

Robert Swain Photographs

Not many people realize that south of the State of Delaware stretches a long peninsula that is neither Delaware nor Maryland, but part of Virginia. On one side of this peninsula rolls the Atlantic Ocean, on the other is Chesapeake Bay. The area is called the Eastern Shore and has a distinctly rural and easy-going atmosphere. One person who grew up and resides there is Robert Swain, an artist who photographs his environment.

One favorite time for taking pictures is early morning. Swain gets into an old 1957 MG, equipped with homemade hand controls, puts the top down, and drives out as the sun rises. "Sunrise," he remarks, "I must have taken hundreds of them and they never cease to pump me up."

Another favorite time for photography is during inclement weather. Fog, rain, and snow, says Swain, often give his subjects more character—especially the sense of beauty in isolation and of desolateness which his eye perceives so readily and appreciates. An old house on a frosty, foggy morning remains his favorite picture. Two empty boats in a snowstorm are a fine expression of "Aloneness and quiet. Beauty."

To capture both panoramas and settings as small as a glass jar near a hand water pump, Swain negotiates all sorts of terrain in his wheelchair. But whatever the terrain, the Eastern Shore is fortunately a relatively flat area. In fact, Swain finds it more accessible than a large city because where he lives there are no steps and curbs—"just grass."

Swain runs a plant and lawn business in Melfa, Virginia—a town of 350 people which he describes as sleepy, rural, and slow-paced. Now 37, he has always wanted to pursue photography seriously, although not as a business. He has never taken instruction in picture taking, and only first became a dedicated practitioner about 15 years ago when a friend sent him a good quality camera from Asia.

Swain became disabled from an automobile accident in 1965 and feels his disability has had one beneficial effect on him—it makes him be more patient. Perhaps also more perceptive about his art. For when taking a picture, instead of moving around thoughtlessly and hoping to capture a fine image by repeatedly changing position, Swain views his subject carefully and scrutinizes it closely before snapping a picture which shows it to its advantage.

—Robert Gorski

The Disability Press

Sources of Information and Image

Many disabled people have said it: I wish I had known about that assistive aid before, or more about that legislation, or how to adapt to a particular field of work. Often information vital to rehabilitation and independent living is not readily available from a person's own community. But today a variety of national media provide consumer-oriented information to disabled persons. One form is publications that address a cross-disability readership, although the extensiveness of this media is not well-realized.

Perhaps these publications lack the glamour of computerized data banks. Or maybe because disabled people are still close to being a closet minority, they cannot yet support a highly visible print media industry. Nevertheless, over a score of good magazines, newspapers, and newsletters designed for national distribution are available today and address all disabled people, or at least a broad range of disabilities.

These publications package a great amount of fresh information and disability experiences, delivering them in a convenient form into the homes of disabled persons. Following is a selection of 11 nationally distributed magazines, newspapers, and newsletters from the great number of publications that can be categorized as the disability press.

ACCENT ON LIVING

Ray Cheever, Editor
Gillum Drive and High Road,
PO Box 700
Bloomington, IL 61701

Each quarterly issue runs 140-145 pages (pages are smaller than standard size, five by seven inches) and includes feature stories about independent living, health, assistive aids,and legislation and extensive advertising from product manufacturers. Main focus is on mobility impaired persons. First published in 1956; current circulation is 19,000; yearly subscription is $5.

ACHIEVEMENT

C. J. Lampos, Editor
925 N.E. 122nd Street
North Miami, FL 33161

This tabloid-sized newspaper appears monthly and has 16-20 pages each issue. It carries news reports about disability rights, government actions at the local, the State, and primarily the federal level, and developments in health and rehabilitation; extensive and opinionated comments from disabled readers and free-lance writers; and advertising from product manufacturers. Directed at all disabled persons, "Achievement" first appeared in 1968; circulation is 5,000; yearly subscription is $3.

DISABILITY RAG

Mary Johnson, Editor
PO Box 145
Louisville, KY 40201

This 20-page, monthly magazine presents short feature articles that contain provocative and opinionated comments designed to stimulate thought about the philosophy of the handicapped movement and civil rights. The intended audience includes all disabled persons, especially those who may not yet be associated with any advocacy group. First published in 1979; circulation is 1,200; yearly subscription is $5.

GCEH NEWSLETTER

Irv Leifberg, Editor
Washington State Employment Security Department
Olympia, WA 98504

Published by the Governor's Committee on Employment of the Handicapped, the 20-page, bimonthly newsletter contains an extensive range of hard news items on political and social developments in Washington State and throughout the country. The primary purpose is to provide civil rights information to disabled persons and disability advocates. First published in 1975; circulation is 5,500; subscription is free and out-of-state readers are added as long as budget permits.

HANDICAPPED AMERICAN REPORT

Helen Hoart, Executive Editor
1300 N. 17th St.
Arlington, VA 22209

This 10-page newsletter is published every other week and is packed with reports on legislation and court decisions affecting disabled persons. The "Report" focuses on activities at the federal level, but includes some items on State actions, research in rehabilitation, and sources for further information.

The target audience includes disability advocates, lawyers, and service providers. First published 1977; circulation is not disclosed; yearly subscription is $40.

HANDICAPPED RIGHTS AND REGULATIONS

Mindy Yochelsen, Editor
951 Pershing Drive
Silver Spring, MD 20910

"Rights and Regulations" is an 8-page, biweekly newsletter packed with information on legislation, court decisions, and actions of the current Administration that affect disabled people. The target audience includes disability advocates, lawyers, and service providers. First published in 1979; circulation is not disclosed; yearly subscription is $107.

MAINSTREAM

T. Andris Ozols, Editor
861 Sixth Avenue, Suite 610
San Diego, CA 92101

A monthly, 40-page magazine, "Mainstream" features articles and regular columns on employment, health, independent living, and assistive aids. Target audience includes all disabled people and professionals concerned with disability. First published in 1976; circulation is 10,000; yearly subscription is $10.

REHABILITATION GAZETTE

Gini and Joe Lauri, Editors
4502 Maryland Avenue
St. Louis, MO 63108

Published once a year, this 64-page journal presents experiences and guidelines from disabled people for living independently, working, recreating, and maintaining good health. The emphasis is on practical experiences; some articles discuss equipment, laws, and government regulations. Mobility impaired people are the primary audience, but the "Gazette" also addresses the needs of blind, deaf, retarded, and elderly persons. First published in 1958; circulation is 10,000; yearly subscription is $4.50 for disabled persons and $7 for organizations and nondisabled persons.

THE BRIDGE

Eugenia E. Greco, Editor
PO Box 11
Guilford, CT 06437

A monthly publication running 70-75 pages each issue, "The Bridge" presents feature articles on living independently, employment, and recreation, plus extensive listings of where to go for further information on selected topics. The target audience includes all disabled people. First published in 1981; circulation is 2,000; yearly subscription is $12.

UP FRONT

Eric Sandahl, Editor
90 Cherry Street, PO Box 519
Johnstown, PA 15907

A 24-tabloid page newspaper, "Up Front" appears 11 times a year and carries hard news stories and editorials on disability rights, rehabilitation, legislation, court decisions, and living independently. Highly opinionated, the newspaper is targeted for all disabled persons. First published in 1979; circulation is 3,000; yearly subscription is $15.

WORD FROM WASHINGTON

425 Eye Street, N.W.
Washington, D.C. 20001

This monthly, 20- to 25-page newsletter is a joint publication of United Cerebral Palsy Associations, Epilepsy Foundation of America, and National Society for Autistic Children. The newsletter presents hard news items and news analysis that inform advocates, consumers, and families about federal legislation and the activities, policies and regulations of the current Administration that affect disabled persons. First published in 1968; circulation is 7,000; yearly subscription is free to individuals in the disability field and $50 to other persons and to private agencies.

Besides nationally distributed publications designed for a cross-disability readership, there is a huge array of publications that focus on specific disabilities. Such publications fill a vital need; but by nature they cannot provide one unique service. For, in contrast, the publications mentioned in this article, and others like them, demonstrate that common experiences and public issues cut across the different categories of disability. They are models that unity of interest among disabled people is possible.

—Robert Gorski

Understanding the Problem

A Look at Retinitis Pigmentosa

For many years after I found out that I had retinitis pigmentosa, I didn't understand my brand of "seeing." Why did I sometimes see things and other times not? I felt my eyes were playing tricks on me or that perhaps I wasn't paying attention to what I was doing. Doctors talked about *peripheral* vision or *field* vision. I didn't relate those words to the way I was functioning with my eyesight.

Most literature on retinitis pigmentosa describes the loss of peripheral vision as tunnel vision. But when I made two little circles with my hands and looked through them as one would peer through a telescope—it wasn't what I was seeing. I was seeing more than that, but yet I wasn't seeing all of what was in front of me.

People who do not have my disability can walk down the street looking straight ahead and see where they will be crossing the street at the end of the block. While looking ahead, they are aware of houses to the left and right, the traffic in the street, bushes, trees, and a bicycle poking a wheel into the sidewalk.

When I walk down the street, I can see the end of the street just as well as anyone else, but what I look at is all I "see." At that moment the sidewalk directly below me is not in my scope of vision. Neither are the houses to the left and the right, the traffic in the street, bushes, trees, nor that bicycle parked halfway into the sidewalk. Since I am familiar with my restricted, 10-degree area of seeing, I become aware of my surroundings by darting my eyes around constantly, and I avoid tripping on that bicycle.

In the eye, the retina transmits nerve impulses to the brain, and we see. Located inside and at the back of the eye, the retina contains tiny light-sensing cells. Some are cone-shaped and most useful in daytime and for seeing colors. Rod-shaped cells are used more for peripheral vision and for seeing at night.

In my eyes, and in the eyes of other persons with retinitis pigmentosa, rod-shaped cells slowly lose the ability to transmit information to the brain. Because the cells do not stop working in an even or symmetrical pattern, the vision loss occurs in splotches. As more rod-shaped cells stop working, the splotches develop and form a roughly ring-shaped area (called the "ring scotoma") on the retina where "seeing" no longer occurs.

Basis for Misunderstanding

Medical literature describes my disability as "almost always hereditary" and cites the classic symptoms of night blindness (trouble seeing at night or in areas of dim light) and "tunnel vision," a term used to describe the loss of side (peripheral) vision. Intensive research on my kind of visual impairment began only a decade ago. However, the emotionally charged, life-long impact of slowly diminishing vision has never been explored or discussed in a comprehensive and straightforward way.

Broadly speaking, the effects of retinitis pigmentosa fit a simple pattern, but they vary greatly from one individual to another. Of the 500,000 persons with my disability, no two have the same degree of vision. The extent of peripheral loss cannot be predicted, nor can the length of time be determined for total peripheral loss to occur.

Usually, but not always, a diminishing field of vision and an inability to see well in low light starts when a person is a child or a young adult. Excessive clumsiness and stumbling may be the first signs of a problem. In some cases the progressive loss of vision stops, but generally all vision is eventually lost. Medical literature, however, consistently remarks that most persons retain some residual vision well into their sixties and seventies.

The hereditary nature of this disability deserves a few words. Retinitis pigmentosa can appear in families with no history of vision problems; and it can occur in successive generations of some families, or in alternate generations (seeming to skip in a hit and miss fashion) in still other families.

Due to poor information and inappropriate genetic counseling, some visually impaired persons needlessly deny themselves a family of their own. Actually, statistics show that a recessive gene causes the greatest number of instances of retinitis pigmentosa, and that people with this gene trait *do not* have a high risk of producing offspring who will have the disability.

Lack of understanding and inaccurate information are common in the lives of persons with retinitis pigmentosa. For instance, when a medical diagnosis is made, a doctor may explain that a person qualifies as "legally blind." Psychologically, this can make a person feel as if he or she were *totally* blind. Furthermore, from a few facts about heredity, a person may presume incorrectly that he or she has a contagious disease, an illness, or the beginning of declining health.

I remember being devastated at 25 when, I felt, an opthalmologist bluntly told me that I would be blind by the time I turned 40. Not only did I not become blind at age 40, I retain some vision even now, ten years later. Medical information can often be confusing to a newly diagnosed patient. Besides, the doctor shares the patient's projection of loss, and feels inadequate because he or she can neither cure nor treat the patient.

To employers without access to accurate information, a worker or a job applicant diagnosed as having retinitis pigmentosa appears to be a formidable risk. Similarly, medical insurance underwriters deny coverage for such employees, or financially strap them with "high-risk" premiums. The genetic nature of retinitis pigmentosa along with its relationship to other physical disabilities creates further confusion and misinformation and has lead to the provision of inadequate (or the outright denial) of health insurance.

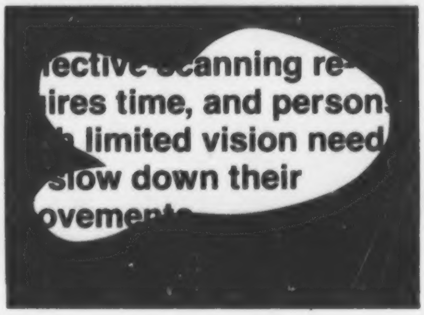
Take Action Early

Early symptoms of retinitis pigmentosa are neither obvious to the person affected, nor apparent to others as a serious problem. In fact, a person may be losing vision over quite a long period of time without being aware of what is happening to his or her eyes.

People think of visual difficulties as problems affecting *central* or straight-ahead vision. A person focusing visual energy on an object, as in reading, is more apt to notice blurred vision as a sign of an eye problem. Even then he may not be overly concerned, especially if he can still manage to make out what is on the page.

Persons with retinitis pigmentosa primarily lose peripheral vision, which involves the "side areas" of vision most people take for granted. These individuals pay little or no attention to the subtle changes taking place "way out there" on the perimeter of their vision.

The feeling of not seeing quite as well at night as others is an elusive but definite indication of trouble. Dim areas and sudden changes in lighting begin to cause both confusion and serious accidents. When mishaps do occur, they are "explained away" as clumsiness, not paying attention, or stupidity. Such situations do not usually instill a sense of urgency to consult a doctor, for defective vision is not considered to be the culprit.



When a person does consult an opthalmologist, a few tips can insure both an accurate diagnosis and good, understandable information about the visual problem.

- Before making an appointment for a complete checkup and diagnosis, ask the opthalmologist if he or she has seen and evaluated cases of retinitis pigmentosa before.
- Ask if a genetic opthalmologist is in your area. Check with a local medical or opthalmological society for referrals.
- Don't be intimidated by any medical advice. Check out the facts about your condition by seeking a second opinion if you are not satisfied with the first one.
- Remember that each individual has the right to accurate information about his or her condition, and the right to choose whether or not to have children.

THE Honeybee Lens

The honeybee lens is a visual aid for partially-sighted people. It consists of three miniaturized telescopes mounted in the upper part of a conventional spectacle lens. Magnification, visual acuity, and field of vision provided by the honeybee lens are three times greater than with previous lens systems.

But the honeybee is not ideal for all partially-sighted persons. First of all many people with very restricted visual fields (and many people with retinitis pigmentosa are in this category) will not gain the full magnification. These people are still best served with reversed telescope field expanders or with fresnel prisms to improve scanning into the peripheral areas of vision.

Second, the honeybee is a heavy device and difficult to wear for long periods of time. Also, the placement of the three miniaturized telescopes and the distortion in vision when the wearer's eyes move cause difficulties when the wearer is walking.

The honeybee lens is most useful for an individual with visual acuity of 20/200 or better, who has no major visual field loss, and who has used telescope lens before. It can be a tremendous aid for persons who perform tasks that involve viewing a blackboard; watching a television or a computer terminal screen; working with ledgers, printouts, and other large manuscripts; and doing other technical work. All these are tasks that require a large field of vision, but not mobility or much head movement.

A thorough clinical evaluation by a low vision optometric specialist is needed in order to determine an individual's ability to benefit from the new lens design, and the honeybee lens must be exactly aligned in order for a person to appreciate the simultaneous views through each of the three telescopes.

—Dr. Randy Jose

This is an edited version of an article that appeared in the December issue of "RP Messenger," the newsletter of the Texas Association of Retinitis Pigmentosa.

Mobility Tactics

By learning a few tips, employing self-discipline, and being conscious of the surroundings, a person can do all he or she wants to do safely, and minimize the psychological and physical problems for themselves and everyone around them. Scanning is important. Because your side vision is limited, constantly "Let your eyes do the walking," and alertly move your eyes from side to side. Also, when moving around, check the path down in front of you frequently to see if obstacles are present.

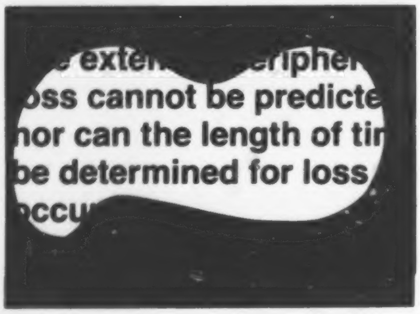
Effective scanning requires time, and persons with limited vision need to slow down their movements and avoid not only stationary objects but moving ones (people, cars) as well.

For eyes sensitive to sunlight, choose nonglare sun shields that permit low ultraviolet and infrared light transmission if at all possible.

When walking at night, use a flashlight with a moderately strong beam to throw a sharply defined arc of light in front of you. Stop driving at night whenever you don't feel certain of your defensive driving capabilities. Vision is more limited at night than many people realize, especially when driving in familiar areas, which can delude a person into a false self-assurance.

When coming inside from bright sunlight, a person with retinitis pigmentosa may temporarily not be able to see anything. By pausing to assess the situation, objects will come into view as the person continues to scan left and right and the cells in the retina responsible for dim vision slowly begin to accommodate the abrupt change in light.

Whenever you begin to feel that your eyes are playing "tricks" on you, try to relate your feelings in specific and objective terms to those around you. For example, if you have trouble seeing where to step off a curb, say so: "I'm coming to an area where I can't see well. I know there's a curb but I'm not sure exactly where. May I take your arm?" (This situation is common when bright sunlight causes extreme glare, or when, on a bright day, a curb is shadowed by a building or trees.)



On the Job

Many persons have firmly established, well-paying positions before a diagnosis of retinitis pigmentosa is made. For years they interpreted symptoms as no more than annoyances. At most, they felt an isolated, nagging awareness that something was wrong. The boss may never be aware of a vision loss, especially if job performance has not been contingent upon good side or night vision.

Sometimes individuals have long-discovered or suspected visual problems. But they have made the most of it without revealing frustrating vision problems to employers for fear of losing their job.

If your job requirements become a major stumbling block, or if you can no longer competently operate or utilize your skills, you may have to realistically think about changing jobs, or transferring to another department within a particular job setting. Also, you might re-evaluate career goals and consider training toward a less performance-limiting field or profession.

Be aware of your limitations and discuss them openly with your boss. Assertiveness and self-confidence can be valuable, constructive tools when going for a job interview. Talk about what accommodations or aids might be helpful or what alternatives may be necessary.

Above all, be sure to relate the *positive* selling points about your particular skills; then ask for a chance to demonstrate them. An employer will be more inclined to consider an alert and assertive individual for his firm than focusing on the disability during a critical job interview.

Losing vision over a period of time is difficult to cope with or adjust to because it is an ongoing process. By the time an individual thinks he or she has figured out a smooth accommodation, more vision loss occurs and new problems emerge. It is okay to allow yourself time to grieve; to assimilate the implications of losing vision; to assess how it will affect family relationships, self-image, and your future. But it is important to be well-informed about your eyes and to plan carefully to tackle your frustrations one step at a time.

Talking with other people who have retinitis pigmentosa is valuable. For that reason the Texas Association of Retinitis Pigmentosa maintains a hotline telephone and has developed a network of persons who have lived for years with the disability and who are willing to share their experiences, both the traumatic and the humorous ones. These "buddies" can discuss techniques for daily activities and will give advice on how to do many things safely. They also want to share the grief, anger and embarrassments felt while trying to understand and live independently with retinitis pigmentosa.

At the Texas Association, we believe that what counts is not what you have, but what you do with what you have. Part of that difference involves taking responsibility for your life and being in charge of your disability. This will gain you the respect of others—and of yourself.

—Dorothy Stiefel

Ms. Stiefel is a writer and also the director of the Texas Association of Retinitis Pigmentosa. The Association's address is PO Box 8388, Corpus Christi, TX 78412-0388. The hotline telephone number is (512) 852-8515.

RESPONDING

FALL 1981

Getting the Signals Right

Thank you for a fine article on handicapped people in amateur radio. I was honored to be one of the subjects. Because my radio status is an important part of my life, I would like to correct the mention of my call letters. I have an amateur license, general class, and the call is W3UTR. I received this call in 1952 (as WN3UTR in the beginning to indicate that I started as a novice). Call signs are almost as much a part of us as our names.

Also, please let me add that the code term QFZ should be QRZ, which is the Q signal for "Who is calling me?" In the interest of setting everything straight, please reverse "CQ Calling" to "Calling CQ." Thank you all again for a really fine and comprehensive article that sets forth the possibilities in amateur radio for handicapped people. I was especially happy to see the Courage Center's amateur assistance program included.

Margaret (Meg) Cauffield
Washington, DC

WINTER 1982

Editor's Note: Through oversight, the Winter 1982 issue failed to identify the person pictured on the cover. That individual is Sam Edwards, a dancer-actor-storyteller and also a deaf person. Edwards is pictured again on page 5 of the issue.

Heading for Footlights

I think it's great that people with handicaps are getting into the entertainment field. I feel more of them should be allowed to show their talent. In one article producer Mona Moore suggests becoming a story analyst and how to possibly break into this field. This would be great for us who are writers.

When and if one of our little theaters starts auditioning for "Whose Life Is It Anyway?," I plan to audition. Why not? I'm paraplegic and I didn't take drama lessons for nothing.

Faye Elam
San Antonio, TX

Advertising Models

I was very impressed by your coverage of disabled people in advertising and media of all forms. Could we please have 75 copies to distribute among our Board members, to members of our Federal Government, and also to companies that have been approached by the Canadian Paraplegic Association to use the disabled in advertising, but who have not yet found occasion to do so?

In addition to the flyer of the Robert Simpson Co. Ltd. and the Sears catalog which you mentioned in the article, I am happy to say that Simpsons Ltd. has used paraplegic models on four other occasions in display and catalog advertising. Woolco has used disabled models on two occasions, and Zellers Ltd. on one occasion. Moreover, McCain's Ltd., a major Canadian food processor, is currently featuring two disabled, world-class athletes in a TV commercial advertising its brand of concentrated orange juice. They are Rick Hanson, a wheelchair marathoner from British Columbia, and Arnie Bolt, an amputee high jumper from Manitoba.

We at the Canadian Paraplegic Association are pleased to report that the initiative which we began as a celebration of the International Year is continuing and growing.

Michael E. Ryan
Toronto, Canada

TV Contestant Shows

Thank you for your kind article about me ("Give This Man a Star"). I had reached an agreement with the producers of "Password Plus," "Blockbusters," and "Battlestars" to accept disabled contestants when NBC cancelled all three game shows.

I got a letter from Mark Goodson, head of Goodson-Todman Productions, assuring me that they did not discriminate. The first two of the cancelled game shows were theirs. The producer of "Matchgame" assured me that if that show stays on the air, it will accept wheelchair users and other disabled contestants. I tried to contact the producer of "Family Feud," but have been unsuccessful so far.

The most resistant producer has been Nancy Jones of "Wheel of Fortune" (Merv Griffin Productions on NBC). She refuses to accept contestants in wheelchairs or who have no use of their arms. I have suggested building a ramp for wheelchair users and having someone else spin the wheel for contestants unable to reach it.

Maurie Goodman, NBC's Vice President of Broadcast Standards, has told me that the network does not want discrimination on the basis of disability. He sees no reason why the game shows cannot install ramps for wheelchair users. He wants to know of any cases of discrimination. He can be reached at National Broadcasting Company, 3000 West Alameda Ave., Burbank CA 91523. (213) 840-3593.

Letters and phone calls to these people help speed progress. It has been my experience that broadcast executives are extremely concerned about public relations. They pay close attention to negative reaction. Letters and phone calls can have great impact in opening up television to persons with disabilities.

Paul Longmore
Los Angeles, CA

the Chairman's Column

TRAVEL BOOKS . . A new expanded edition of the "International Directory of Access Guides" is now available from Rehabilitation International, USA Travel Survey, Dept. NL, 20 W. 40th Street, New York, NY 10018. The directory is a bibliography of over 400 guides covering the United States and 25 other countries.

. . . *A Travel Guide for the Disabled: Western Europe* is the first comprehensive travel guide for disabled people touring Europe. The guidebook contains names, addresses, phone numbers, prices, and descriptions of many hotels, restaurants, theaters, shops, and tourist attractions—and evaluates their accessibility. In the book a reader finds information on negotiating airports, using local ground transportation, and getting emergency medical care.

Foreign language lists for each country provide the translation and pronunciation of health-related words that a disabled traveler should know. The author of the book, Mary Meister Walzer, is a disabled person who has traveled extensively in Europe and North America. *A Travel Guide*, priced at $11.95 paperback and $18.95 cloth, is published by Van Nostrand Reinhold, 135th St., New York, NY 10020.

FREE INFORMATION BY PHONE . . . The Information Center for Disabled Individuals includes a service for disabled travelers. The center does not book travel arrangements, but it can provide much information and helpful tips on accessible hotels, motels, tourist attractions, modes of transportation, restaurants, and other travel topics. Call (215) 329-5715 (voice) or (215) 329-4342 (TTY), or write the Information Center for Disabled Individuals, Moss Rehabilitation Hospital, 12th Street and Tabor Road, Philadelphia, PA 19141.

TOURS FOR ALL PERSONS. . . Dozens of organizations and agencies across the country either focus exclusively on or have a special expertise about travel for disabled persons. The following list is only a brief sample of places that disabled people can contact for assistance.

—Catholic Travel Office, Suite 520, 1019 19th St., N.W., Washington, DC 20036
—Evergreen Travel Service, Wings on Wheels, 19505 44th Ave. West, Lynnwood, WA 98036
—Flying Wheels Travel, 143 W. Bridge St., Box 382, Owatonna, MN 55060
—Handicapped Travelers Association, 1291 E. Hillsdale Blvd., Foster City, CA 94404
—Handy-Cap Horizons, 3250 East Loretta Drive, Indianapolis, IN 46222
—Preferred Travel, 837 McLean, Yonkers, NY 10744
—Pinetree Tours, 3600 Wilshire Blvd., Suite 1516, Los Angeles, CA 90010
—Ramblin Tours, PO Box 1304, Hallandale, FL 33009
—The Guided Tour, 555 Ashbourne Road, Elkins Park, PA 19117

Also, the Society for the Advancement of Travel for the Handicapped,at 26 Court St., Brooklyn, NY 11242, has listings of accessible hotels and tour attractions worldwide, plus a directory of travel agencies knowledgeable about travel by handicapped persons.

RENTING CARS . . . At least three American car rental companies provide hand-controlled automobiles to mobility impaired customers. These companies are Avis, Hertz, and National Car Rental. Disabled persons should request modified vehicles well in advance because each company has different policies for its hand-controlled cars. For example, not every single dealership of each company can install hand controls.

Furthermore, Hertz requires a hand-controlled car to be returned to the city of pick-up, even if the disabled driver is willing to pay for returning the controls by mail. Avis permits hand-controlled cars to be left in other cities, but only at dealerships owned by the corporation, not at ones franchised by the corporation.

. . . Portable hand controls for automobiles are manufactured and sold for $94 by Super Star Accessible Hand Controls, Inc. Contact the company at 4335 S. Santa Fe Drive, Englewood, CO 80110. (303) 781-2062.

ACCESSIBLE FLIGHT . . . For disabled travelers, United Airline's new jet plane, the 767, has notable improvements over other planes now flying. Some aisle seats have removable arm rests permitting disabled passengers to slide more easily between a wheelchair and passenger seats. One lavatory has grab bars and is accessible to wheelchair users. All United 767s will fly with a wheelchair on board for passenger use.

GOING INTERNATIONAL . . . Mobility International is a London, England, organization that encourages and assists the integration of disabled people into travel, leisure, and educational exchange programs. The organization has pioneered international activity camps (such as for sailing and desert camping) for specific disability groups, co-sponsors international youth festivals and conferences, and disseminates information on accessible travel.

The organization's American affiliate is Mobility International USA (MIUSA), and it can be contacted by writing to PO Box 3551, Eugene, Oregon 97403. MIUSA offers disabled people low-cost travel ideas; advocates integrating disabled people into travel programs; provides information on education exchange programs, international activity camps, cultural festivals, and camps where volunteers work on community projects; and helps people make new friends and penpals all over the world.

Harold Russell

THE PRESIDENT'S COMMITTEE
ON EMPLOYMENT OF
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FALL 1982

DISABLEDUSA

Disabled People - Their Jobs and Professions:
Investigating the atmosphere. . . operating construction equipment. . . assembling tools and office products. . . refining new computer technology

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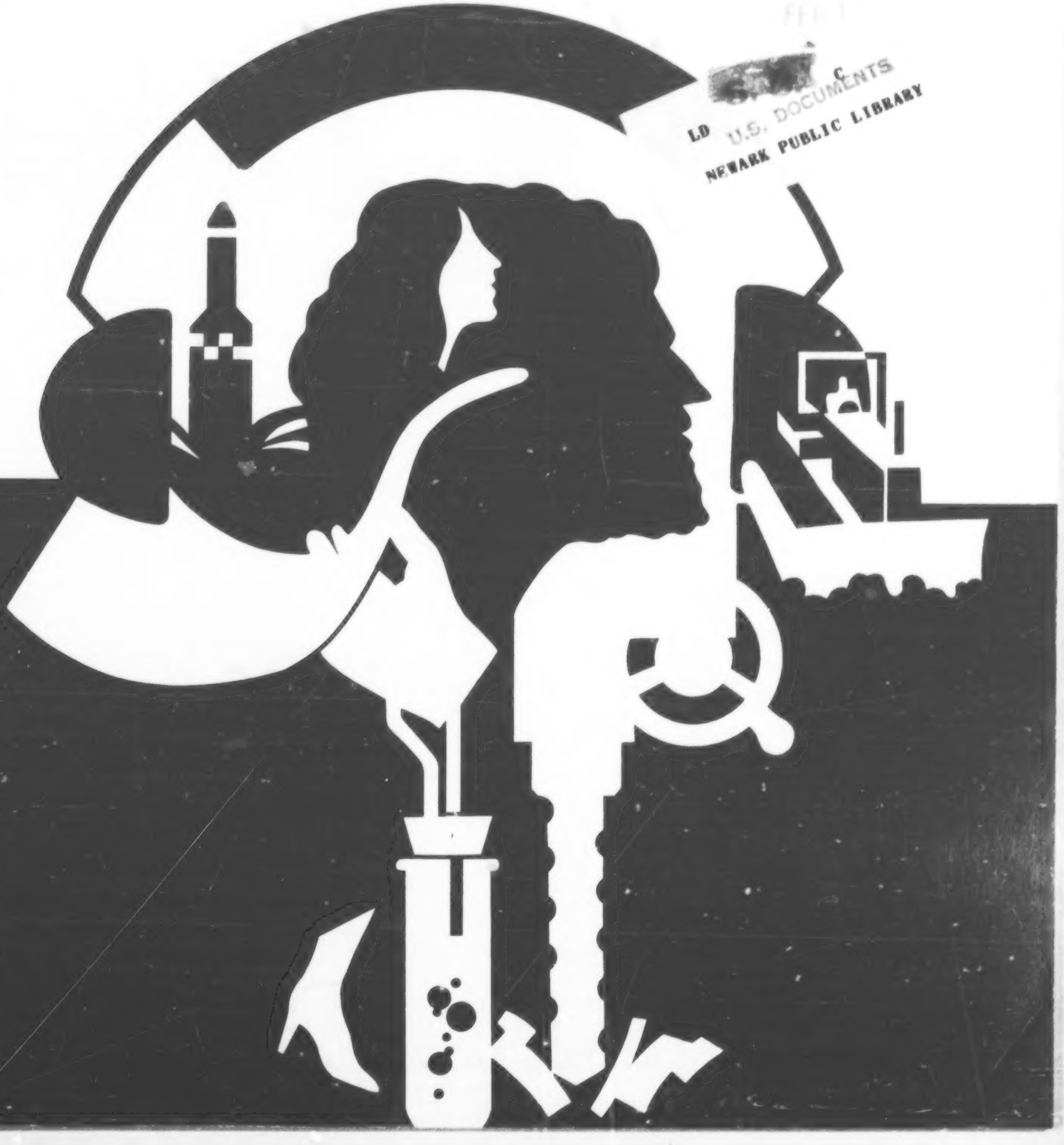

FALL 1982

DISABLEDUSA

Disabled people work everywhere in the economy. Too many still have no employment - or no opportunity in their preferred field; but progress and inroads occur. No single reason accounts for the improvement. Individual motivation, innovative programs, the continuing use of established services, new assistive devices, and better ways to make familiar ones all open up opportunities where none existed before - or were there but neglected.

1

CIRCUITS UP!

4

THEIR WORK SAVES YOUR MONEY

8

"GET INTO A GOOD PROFESSION"

Ted Barber aimed high for a career in science, and persisted. Along the way he developed some of his own adaptive aids and he ignored inappropriate advice. Now, he is an expert in his field.

12

JOBS ARE IMPORTANT

19

BLIND PLUS OTHER IMPAIRMENTS

21

HIGH HEELS

23

TO WALK AND WORK IN COMFORT

28

HEARING AID HALL OF FAME

State-of-the-art technology may ultimately mean the "end of the line" for hearing aids. Considering them for a museum-like honoring is neither all that whimsical nor premature.

30

TO RACE THROUGH THE SNOW

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AN ACCESSIBLE HOUSE IS A HOME

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CHAIRMAN'S COLUMN

PHOTO CREDITS: Page 3, John Williams, page 4, Al McKoy; page 7, Al Crosby; page 8, Sue Paxton Gomez; page 10, Frank Trevino; pages 12, 14, and 17, Fellowship House; page 19 and 20, National Industries for the Blind; page 26, Institute for the Advancement of Prosthetics; page 28 and 29, Thomas Bishop, Jr., page 31 and 33, Bud Van Orden; page 36, David Stone.

ART CREDITS: Page 34, Zeb Rogerson

Robert Gorski, Editor
Robert Lovelace, Art Director
Patt c. Hoetmer, Designer

DISABLED USA reports progress in opportunities for all handicapped workers, keeps Governors' and Community Committees informed of new ideas and activities, and provides all readers with general information concerning developments in rehabilitation and placement of people with disabilities. In a phrase, Disabled USA presents the case for disabled adults.

The Chairman of the President's Committee on Employment of the Handicapped has determined that the publication of this periodical is necessary in the transaction of the public business required by law of this Agency. Use of funds for printing this periodical has been approved by the Director of the Office of Management and Budget through March 1, 1987. Annual (four issues) subscription rates are $9.50 (domestic) and $11.90 (foreign). Single issues are $4.50 (domestic) and $5.65 (foreign). Address all inquiries about paid subscriptions and purchases to The Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20401. A limited number of complimentary copies and subscriptions continue to be available from the President's Committee on Employment of the Handicapped, Washington, DC 20210.

DISABLED USA encourages the submission of articles for publication by all readers, especially disabled people. Articles should be eight to ten, typewritten, doubled-spaced pages, written in an informal style.

Circuits Up!

Creative Electronics Make a Difference in Employment

Unemployment. Underemployment. These situations are common to many of the nation's 36 million disabled persons, despite our vast resources in rehabilitation and job placement. Part of the difficulty lies with many jobs being impractical for persons with severe disabilities. New technological advances, however, make the unfeasible possible. A speech impaired person and a visually impaired person are two individuals who are using new technologies to become employed in fields that were once taboo.

CARL SHORTLEY

Before commencing to tell a favorite personal anecdote, Carl Shortley checks a metronome device he carries in his left ear and then waits three seconds. The metronome is small, battery-operated, and resembles a hearing aid. When turned on, it creates a continuous beat, faintly audible only to the wearer, to which Shortley regulates his speaking rate. Some people who stutter can reduce the rate and severity of their disability while listening to the metronome.

Shortley's anecdote is about the reactions that able-bodied people have to him and the metronome. "Their reactions," he says in preface, "are the same in nearly every circumstance. Only the faces and races change. Two years ago was the first time it happened, when I was introduced to Mariam Jane Merrill, vice president of a major publishing company in New York City." Shortley pauses briefly and then continues speaking in a rhythmical and regular pattern.

"When Merrill saw the metronome, she thought I was deaf and started talking louder than normal, aiming her voice at my right ear. I thought she was deaf and talked louder, too. At least three minutes passed before I interrupted her and said politely, 'I stutter. The aid you see in my ear is a metronome and not a hearing aid. I wear it to control my stuttering.' Merrill was embarrassed and apologized for her reaction."

This was the first time that Shortley had worn his metronome to a publishing interview. As he has many times since then, he accepted the other person's apology and continued the conversation. When the talk ended, Shortley, a writer and a painter in his mid-twenties, was overjoyed—the publishing firm agreed to produce two of his novels within six months.

In the months following this successful interview, Shortley had over a dozen other meetings with people whose reactions were similar to Merrill's. Now when he meets new people and is wearing the metronome, Shortley usually tells them immediately why he is wearing it. The new reactions he gets are much less disruptive, though they still tend to fit a pattern. "At first they are apologetic about it" Shortley explains. "I can see the look in their faces asking: What is he like without it? I am glad they don't know. For without the metronome, I would be terrified to speak. Because I stutter so severely, I scare people away."

No jobs were offered, and often he was told that his disability was the reason.

Shortley started to stutter slightly when he was about age nine. At first his family ignored it and so did he, but gradually it worsened. By the time he was 12, Shortley was stuttering severely. Being shy and introverted made his difficulties even more stressful, especially when at school or with his family he was called upon to speak.

"I was petrified of speaking. When I did, my stuttering was worse. I hated and cursed it, and I was always in arguments with my parents and both sets of grandparents. At home, life was pure hell. So I studied hard in high school and won a scholarship to UCLA. The only times I ever saw my parents happy over me were the day I received notice of the scholarship and the day of my college graduation."

In grade school, Shortley had taken speech therapy, but it never seemed to relieve his disability. Believing that "someday it will go away" by itself, Shortley gave up on therapy. Nevertheless, by the time he began taking job interviews while in college, Shortley's stutter continued to persist and he learned a new price that his stuttering was costing him. No jobs were offered, and often he was told his disability was the reason.

A few weeks before his graduation, Shortley decided to investigate therapy again and visited UCLA's speech clinic. It was here that he first learned that by listening to a background rhythm, some people were controlling their stuttering. After graduating UCLA, Shortley traveled to a speech clinic at Pennsylvania State University for intensive speech therapy.

"The therapists at Penn State," he remembers, "were terrific. I learned a lot about myself, about stuttering and ways to control it. I became relaxed with it, and the metronome was a miracle." In pursuit of more expert advice on his disability, Shortley next traveled to Philadelphia and became a patient of Dr. James Brady, an acknowledged leader in the treatment of stuttering and the use of the metronome. Shortley's stuttering continued to lessen, and after a few months he started speaking fluently when wearing the metronome.

Using the metronome has been a blessing for Shortley. Besides pursuing a writing career, he works for a major advertising company in New York City. As an account executive with this firm, Shortley writes advertisements for both television and the print media. Once a week he makes a presentation before a client or potential client—without stuttering. He feels more confident about his abilities and no longer has to endure being interrupted and frustrated by his stuttering and the reactions of other people. Furthermore, he dates some of the models with whom he works, "that is the best benefit my job offers. I enjoy being in the company of beautiful women."

About his metronome, Shortley says, "I thank God for it. My stuttering was so bad that I have had people walk away when I was talking. The metronome allows me to speak freely."

TED HENTER

Formerly, Ted Henter, 31 years old, worked as a professional motorcycle racer in international events. He had a 1974 Bachelor of Science degree in mechanical engineering from the University of Florida. Besides success at racing, Henter also achieved distinction in mechanics, patenting a motorcycle maintenance tool and an hydraulic suspension system.

In 1977 a car accident in Kent, England, detached the retinas in both of Henter's eyes and he became blind. "I knew my life would not be the same, but I was aware that many disabled people, particularly blind people, have made a successful adaptation to disability."

Henter's talents and positive attitude were aided by electronic devices. All three were important in minimizing the impact of disability on his ability to be responsible for his own livelihood. Today, Henter works as a professional computer programmer, not just for a retail business or a manufacturing company, but for a computer firm in Forest Hills, Maryland, where he does advanced work in computer programming.

In developing his second career, Henter's first technological aid was by current standards a simple and ordinary one—a cassette tape recorder. But while Henter attended college for the second time (this time with a visual impairment), the tape recorder was, he says, "a valuable tool. I used it to tape all of my lectures and prepare my notes, and I even put some assignments on it."

To Henter, a career in mechanical engineering was no longer possible. Computer programming interested him, and it was a field that some blind persons were entering with success, although a visual disability made it a challenging choice. So, while attending college in Florida, Henter took the first of a half dozen courses in programming and, in his off hours, he began working for Resort Inns of America in St. Petersburg, Florida.

At this job, Henter succeeded in helping to develop and write a computerized reservation system. But more importantly, it was here that he learned about a new technological development that would expand his career opportunities. The new development was a computer terminal equipped with a voice synthesizer. This machine "spoke" out loud whatever Henter entered into the computer, as well as all information Henter directed the computer to put out.

The device was called Total Talk and had been developed by Maryland Computer Services, Inc. For a year and a half, Henter used the newly developed Total Talk on his job in Florida, while frequently working with its developers to improve the technology. So familiar did Henter become with Total Talk, the president of the development firm, Dean Blazie, decided Henter was a valuable resource for the company and offered him a job. "He knew a great deal about our talking products," recalls Blazie, "and I wanted to put his knowledge and his enthusiasm to work for me."

In October the year before last, Henter accepted an offer to move to Maryland and work for Blazie's firm. One of his major projects has been developing a talking capability for what are called "microcomputers." These are the astonishingly small and relatively affordable machines that make computing technology available to thousands of small and moderate-size businesses.

With other staff at the firm, Henter helped develop a revolutionary talking computer, using a Hewlett Packard 125 professional computer. Henter and his colleagues decided to call it Information Thru Speech (ITS for short). With a headphone, Henter "plugs into" the computer and listens to it read programs, written by other people, for him to improve and rendor error-free. ITS also tells him what he is entering into the computer as he composes and edits user manuals; ITS even reads the Wall Street Journal to him.

All this happens without another person first reading printed material aloud or onto recording tape. Henter's ITS-equipped computer reads directly what another machine had previously entered into electronic storage.

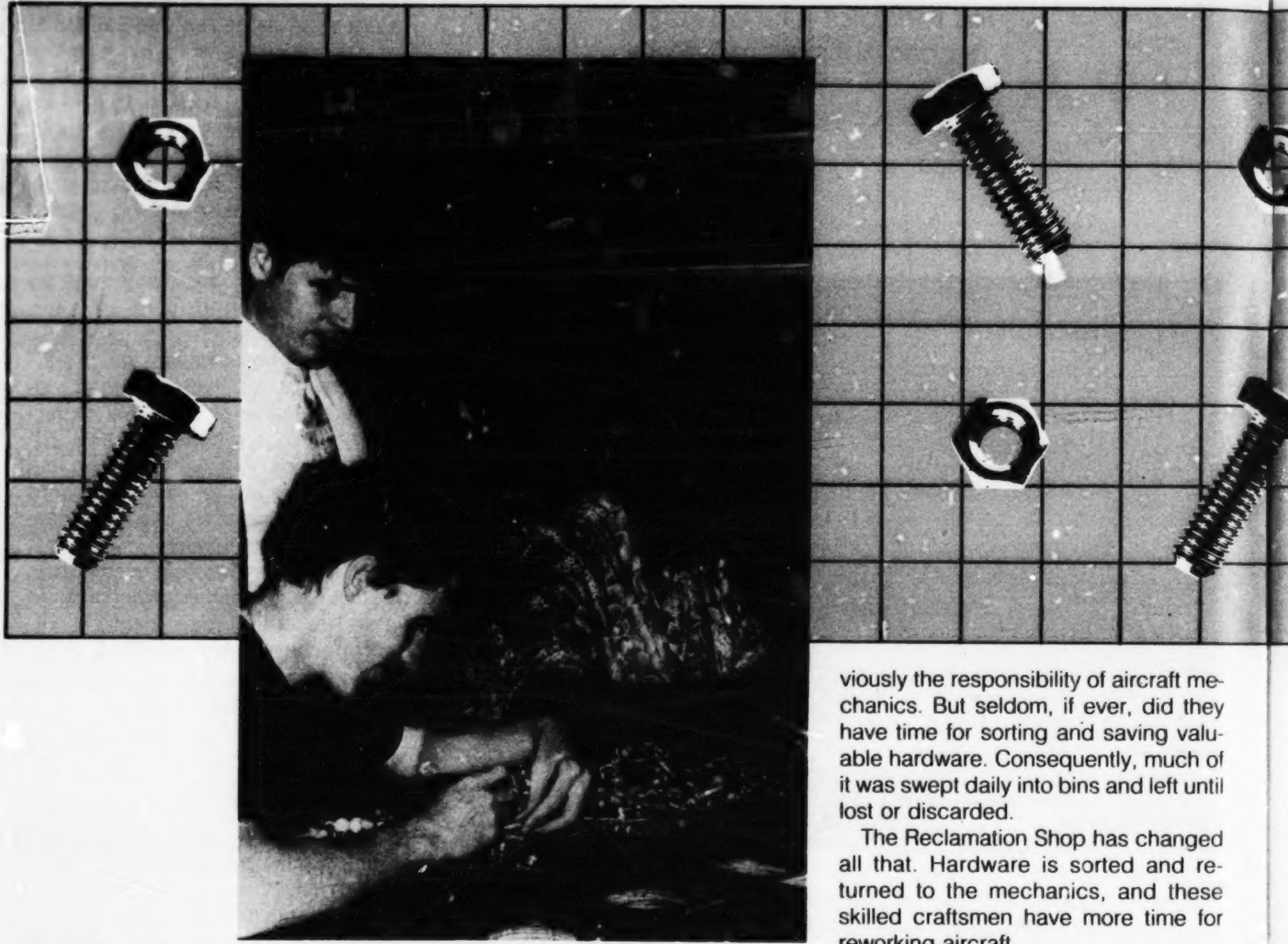
With this technology, Henter is opening up new employment opportunities for visually impaired programmers. Before now, talking computers have been able to perform many business activities, from checking inventories, providing customer support services, and reviewing accounting procedures to researching documents and writing reports. But with talking capabilities harnessed to modern microcomputers, a large number of employment jobs with smaller businesses are possible for visually impaired persons.

Carl Shortley and Ted Henter are benefiting from the marvels of new technology. Talking computers and miniaturized metronomes enable them to compete with able-bodied professionals in the job market. These devices and hundreds of others—and new devices still being developed—will do the same for other disabled people.

—John Williams

Mr. Williams is a free-lance writer.

Their Work Saves Your Money



Using a soldering tool, Jimmy Krough, a 23-year-old worker, disconnects wires from electrical connectors. Audrey Phillips, a mother of five, cleans sealant from tubes with an air hose while Zeke Irizarry, a teenager, disconnects switches from airplane cockpit panels.

At a worktable laden with hardware, Miriam Davis, a woman in her mid-twenties, efficiently sorts through mounds of aircraft parts. When she finds the particular item for which she searches, Miriam drops it through a hole in the top of the table and it falls into a waiting bucket.

The jobs are tedious and repetitious, but to these four people with mental handicaps, the work is interesting, even exciting. They work in the Reclamation Shop at the Naval Air Rework Facility at Pensacola, Florida. They have difficulty thinking of any other job they would rather have, except Irizarry, who has a vague desire to be a "big boss" over many workers, and Krough, who, fascinated with aircraft, hopes to one day work directly on them. Although these dreams are not realistic ambitions, they reflect a high desire and drive for doing a good job.

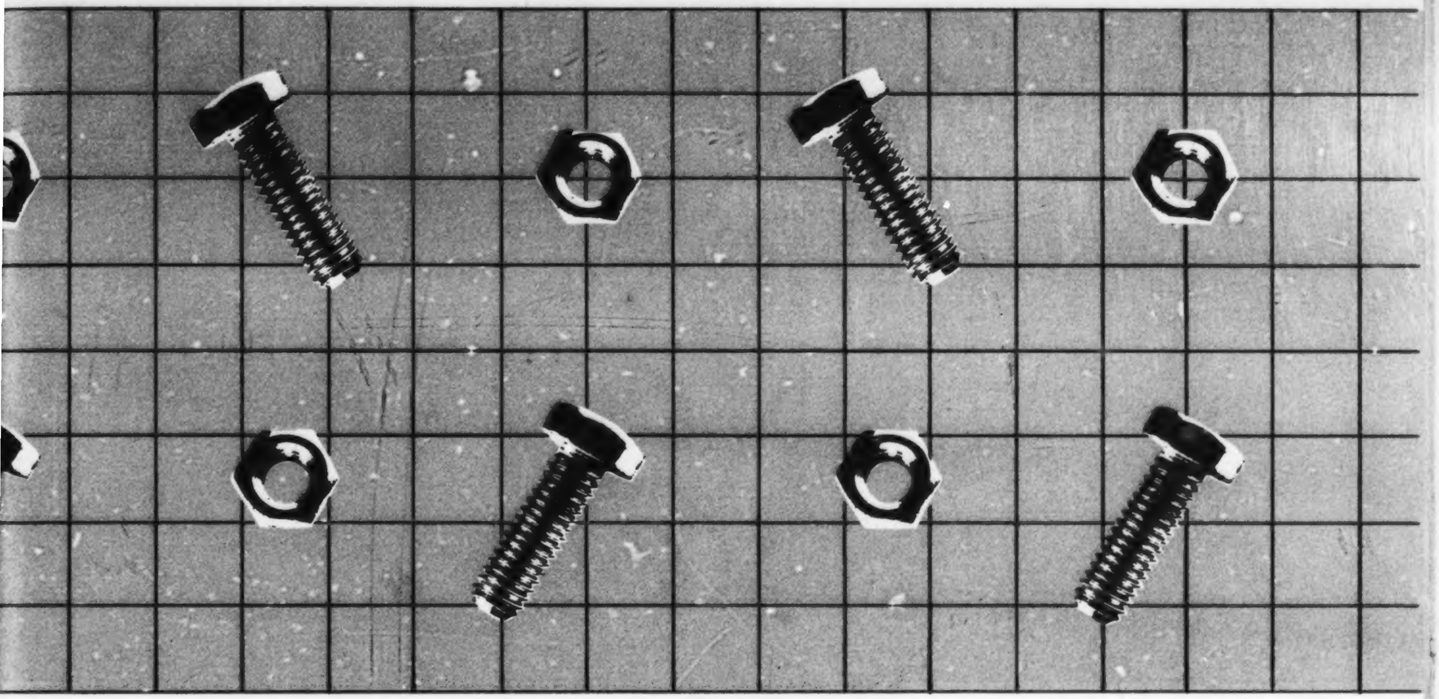
During the disassembly of U.S. Navy aircraft for rework, several drums of nuts, bolts, rivets, screws, washers, and other parts accumulate daily. Reclamation of these parts had been previously the responsibility of aircraft mechanics. But seldom, if ever, did they have time for sorting and saving valuable hardware. Consequently, much of it was swept daily into bins and left until lost or discarded.

The Reclamation Shop has changed all that. Hardware is sorted and returned to the mechanics, and these skilled craftsmen have more time for reworking aircraft.

The Reclamation Shop was established in 1980 when interest in incorporating handicapped persons into the Rework Facility's workforce coincided with a concern to utilize the existing workforce more cost effectively. When parents of handicapped persons met the facility's commanding officer, the idea for an employment program directed at mentally and physically handicapped individuals began to take shape. After discussions with Frank Cherry, an aircraft electrician and the father of a mentally retarded daughter, the idea gelled into the Reclamation Shop, with Cherry in charge.

To get started, Cherry worked with vocational rehabilitation counselors

Disabled Workers Reclaim Navy Aircraft Parts That Used to Be Thrown Away



and job training programs in Pensacola. Counselors evaluated position descriptions and specific duties for different jobs at the naval air facility and identified tasks and positions appropriate for disabled workers. Flexibility of work scheduling and stress in the different work environments were among the factors that counselors took into account.

From local rehabilitation and training programs Cherry received assistance in identifying disabled workers who, with training, would likely perform well at reclamation tasks. The most important functional skills required were the ability to sort and the ability to handle repetitious work for long periods of time. Candidates, furthermore, had to expect to interact professionally with nonhandicapped and other handicapped workers.

Before joining the shop's eight-member workforce, mentally disabled persons are trained in tasks they will perform, as well as in expected job behavior. The Pollack Work Center has been providing this training, and also more recently training in filing computer cards alpha-numerally—another time-consuming and repetitious job, but a necessary one at the naval facility.

One expected job behavior emphasized in the Pollak Center is that workers concentrate on their tasks even when other people walk by them. To develop this behavior, staff at Pollak put temporary partitions around a practice work site at which candidates for the naval facility perform tasks similar to jobs at the Reclamation Shops. After a day or two, the partition is removed and the Pollak staff observe the productivity of each mentally handicapped worker under the new, more realistic conditions. If a worker becomes distracted in the open environment, staff replace the partitions and start the training over again.

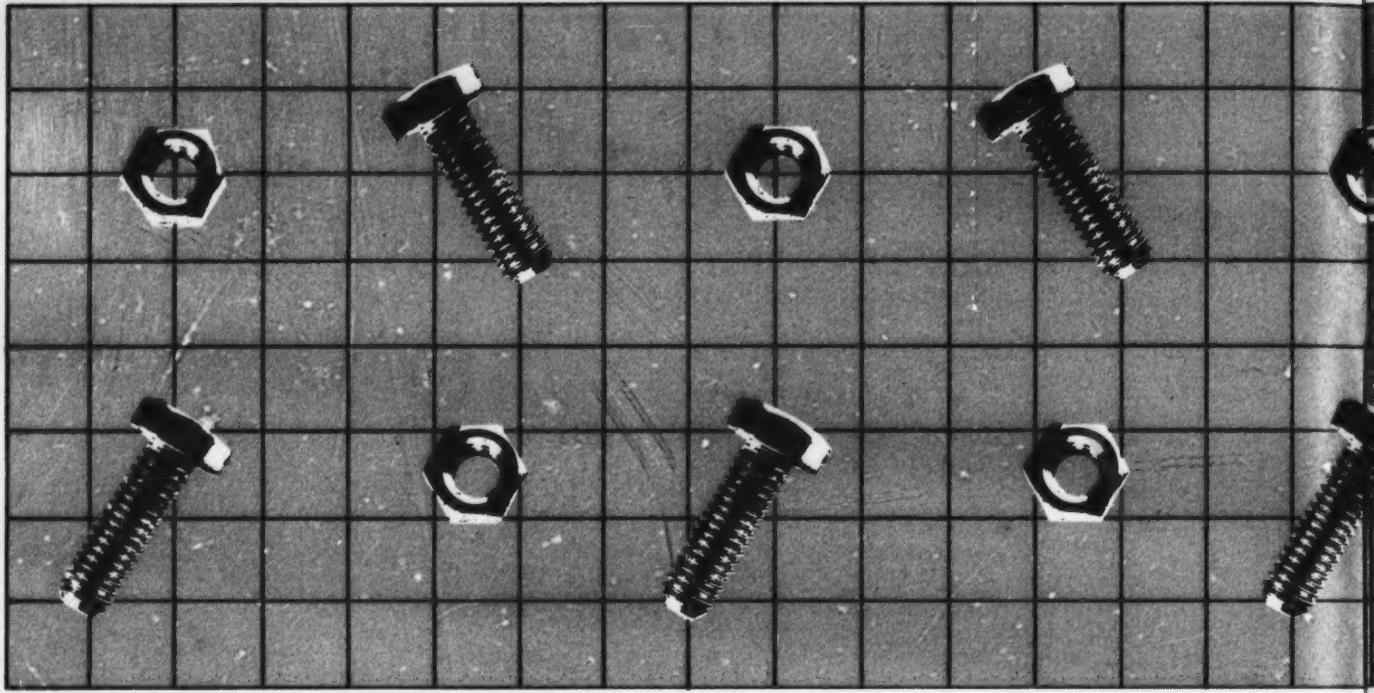
According to Cherry, another important element in the employment program was for the workers to be motivated to earn money. To achieve this, the families of disabled workers participating in the program agreed to withhold some financial support from their disabled working members if their performance fell and they were placed on leave without pay for a period of time.

Not all workers in the Reclamation Shop are mentally handicapped. Currently, one worker has a physical disability, and amputees, paraplegics, and partial paraplegics have been among past workers. So far, no deaf individuals have worked at the shop. There has been one blind person; however, he found the work unchallenging and shortly quit.

Supervising shop activities is Genevieve Darby. Her husband directs the Pollak Work Center, and together the Darby's have worked with mentally handicapped people for many years. Because the Reclamation Shop is effective, says Darby, there is never a lack of work. "People find more and more things that can be done to save money in the reclamation effort."

While many savings achieved by the shop go undocumented, Darby feels certain that the list of money-saving

The Salvage Works Saves Valuable Hardware and Returns Some Planes into the Air Sooner



tasks is long. For instance, the cost for Audrey Phillips to clean tubes for reuse has been estimated at five cents each; new tubes cost fifty cents each.

Once, 50 outdated airframe change kits for helicopters were destined to be scrapped and replaced by new kits. But sent to the Reclamation Shop and disassembled, the kits yielded many salvagable parts. Fifty completely new airframe kits would have cost almost $4 million, except that the shop salvaged $200,000 of reusable parts from the outdated kits.

When the naval facility at Pensacola brought in a computer terminal to help keep worker time records, the task of coding 9,000 time cards (two for each worker at the facility) was priced at over $19,000 by an outside contractor. Reclamation staff undertook this job and the cost was about $2,000—saving the Navy over $17,000.

In two and one-half years of operation, the shop has achieved over $700,000 in documented savings, over and above the wages of the shop workers. One important undocumented saving is the reduction in the turnaround time in reworking aircraft. "There are times when just one part keeps an aircraft from flying," says one production controller. "It happens over and over again. At the Reclamation Shop I find parts that I've been trying to locate, parts without which an aircraft's rework is held up. Every day an aircraft is delayed because of lack of parts, the operation costs are estimated to be $100 a day to the plane's squadron."

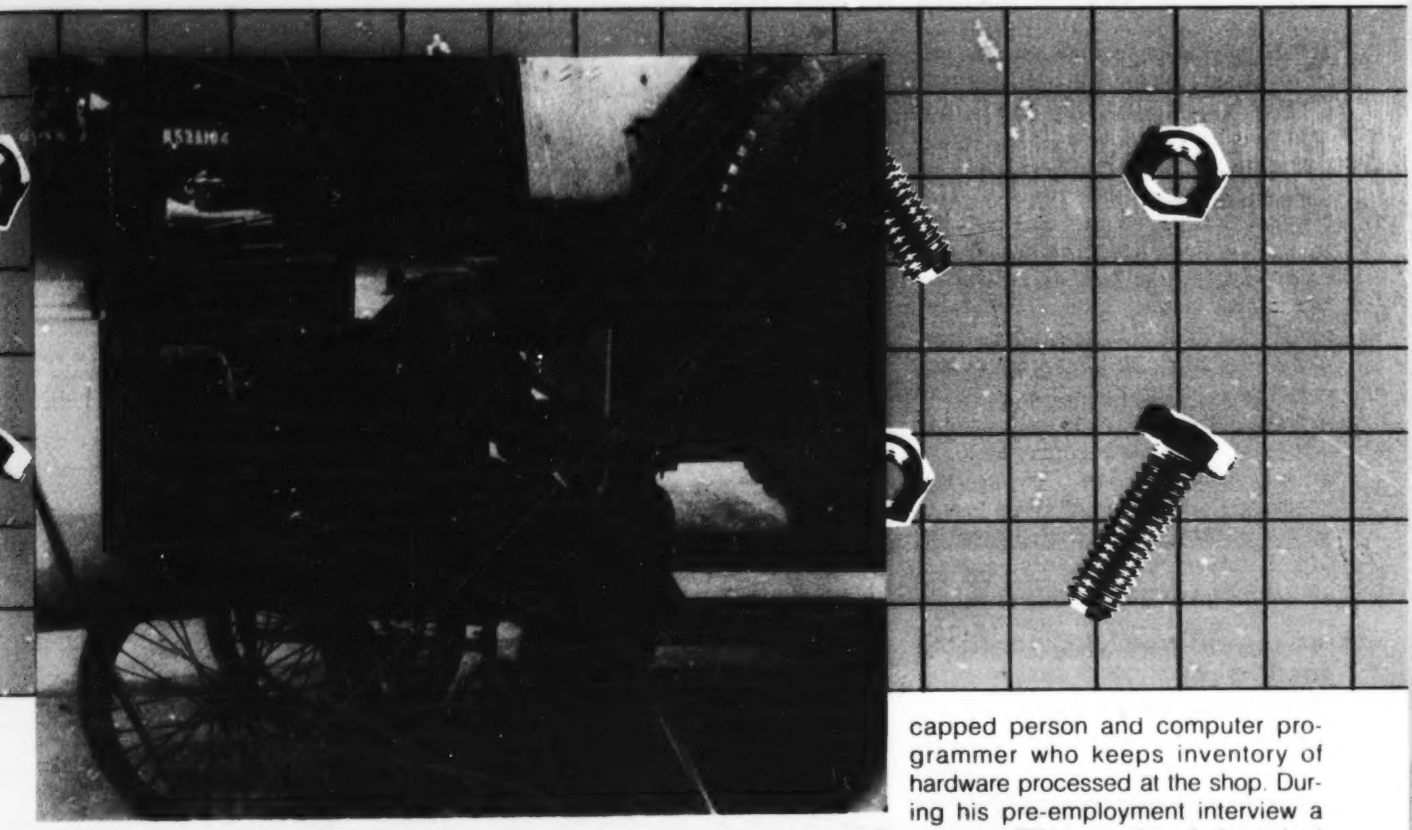
The disabled workers at the Reclamation Shop receive pay according to standard wage and grade ratings. Usually, new workers begin at either the one or two level and earn above the minimum wage. After 12 months of employment, workers advance to higher wage-grades and even enter four-year apprentice programs. So far, half of the mentally retarded individuals have advanced beyond grade two.

Pride in their work and in their independence is common among the employees of the Reclamation Shop. All state that they are saving part of their salaries. Miriam Davis, who lives in a group home for mentally handicapped people, hopes to buy her own home one day. For now she pays her portion of the rent, her grocery bills, and—proudly—a portion of a cable television service.

Zeke Irizarry and Jimmy Krough, who both live with their respective parents, are saving portions of their earnings, too. Irizarry, who feels the "work is kind of hard and kind of easy," hopes to eventually buy a car and get his driver's license.

"If I didn't have this job," says Audrey Phillips, a regular depositor in a local credit union, "I wouldn't have any work. I'm just saving my money. If I want something, then I know it's there." Besides having a mental handicap, Phillips also has a physical handicap. An injured hip is held by a pin surgically inserted into the joint. Phillips cannot bend down, but improvises well to overcome the limitations of this disability.

According to Frank Cherry, the goal for all workers who start in the Reclamation Shop is eventual main-



streaming into the facility's workforce as helpers and skilled workers. But so far this has not been possible for all mentally handicapped employees. While several have passed trial periods outside the Reclamation Shop, Irizarry—one of the youngest workers in the shop—did not. But he will get a second chance later.

After getting acclimated to the work environment at the facility, physically handicapped workers, says Cherry, are usually assigned to jobs outside the Reclamation Shop. Some workers receive additional training for these new jobs. Other times a worker had already been trained in the past, but the onset of disability interrupted the person's career.

One such worker, Lamar Booker, has now advanced to be an aircraft engine mechanic's helper. Another wheelchair user now works as a clerk, laborer and aircraft electrician helper. All physically handicapped workers who started in the Reclamation Shop have done well at production jobs in other shops. Dedication and work abilities, supervisors report, are above average.

Many rewards result from the Reclamation Shop program. For the Navy, there is tremendous monetary savings. For the disabled workers, there is pride and respect in themselves and what they do as they terminate government cash benefit programs (Supplemental Security Income, for example) and become self-supporting. Finally, the able-bodied people involved with the employment program at the Rework Facility experience pride as they watch people grow into more self-reliant and independent citizens.

Another and somewhat intangible reward that society as a whole receives is expressed by one of the shop workers. David Ellis is a physically handicapped person and computer programmer who keeps inventory of hardware processed at the shop. During his pre-employment interview a year ago, Ellis remembers being asked how he would feel about working with mentally handicapped people. Other workers at the naval facility, Ellis was told further, would often perceive him as mentally handicapped, too.

At the time Ellis had no way of evaluating his feelings because he had never worked with mentally handicapped people. Now, Ellis feels his job is ideal. "I watch these people do the same thing over and over again with the same high degree of accuracy, and no one else does a better job. They operate on a different level than others, that's all. We look at what each can do, rather than at what they cannot. I can't carry heavy boxes, they can. They don't operate the computer, I can—so we do those jobs we're best suited to do."

—Marge Sanders

Ms. Sanders is public relations officer at the Naval Air Rework Facility.

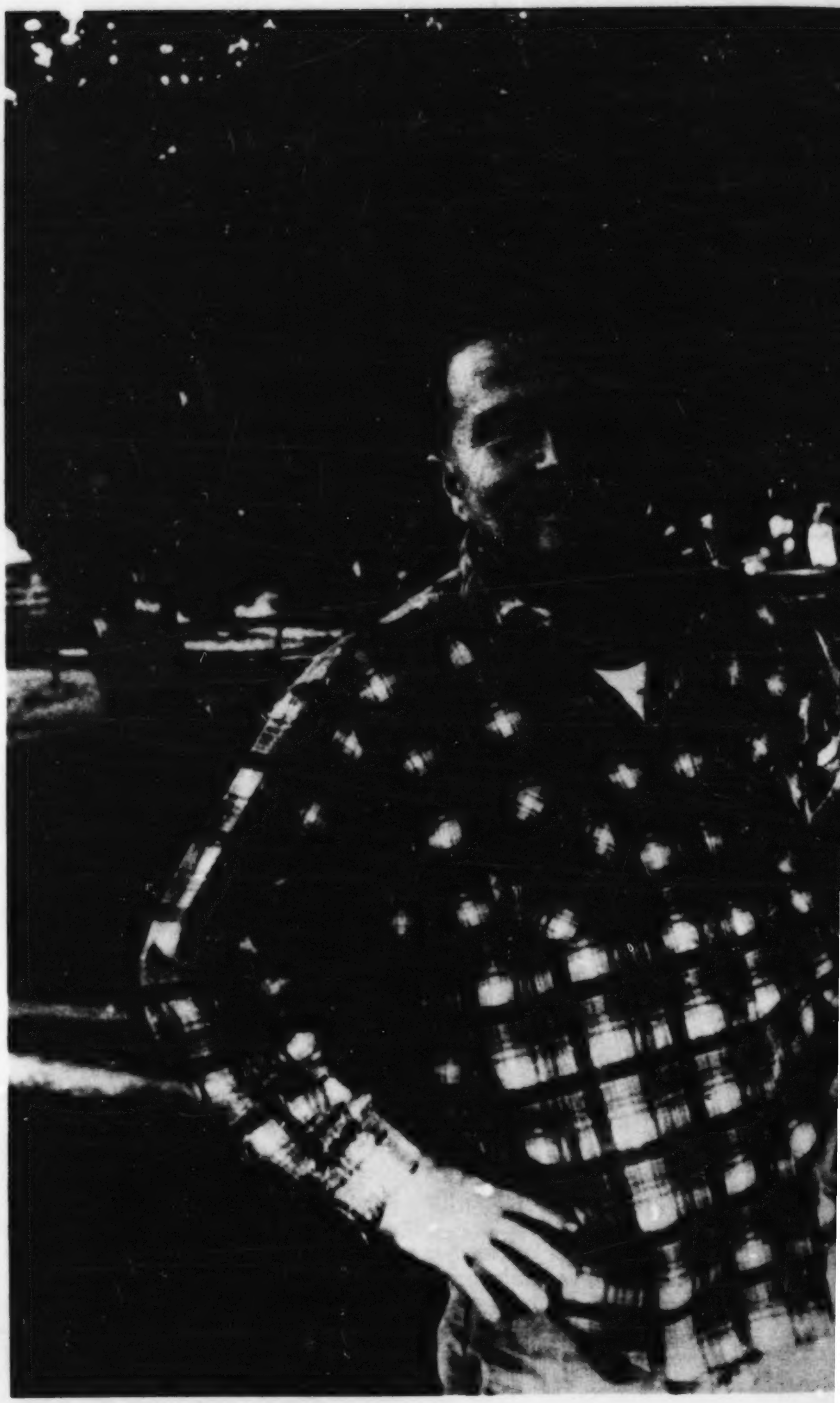
Shortly after an accident caused him to lose more than 95 percent of his vision in 1948, Ted Barber set out with a friend for a hike along an Oregon mountain gorge. Pausing to rest, he noticed what seemed to be a bright patch of material between his feet. But as he bent closer to the brightness, Barber saw that it was in fact a split in the rocks on which he stood. Suddenly he realized he was straddling a 1,000-foot drop to the gorge below.

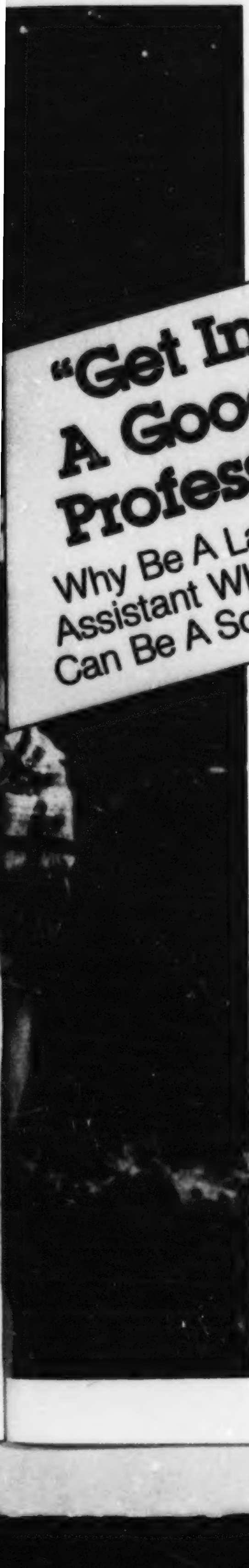
While he admits that the incident frightened him, Barber continued to be an avid outdoorsman. "To me, rehabilitation sometimes requires taking a few chances," explains the 50-year-old Barber who works as an atmospheric physicist at the White Sands Missile Range in New Mexico. "And even though I've had my share of skinned knees, I don't believe I could have done it any other way."

Barber lost his vision after eating a handful of mercury-contaminated wheat when he was 16. For the most part, he has charted his own course of rehabilitation during 34 years of near blindness. "The rehabilitation services in Oregon were nearly nonexistent when I lost my vision," he recalls. "Most blind people then were simply given a few braille typing classes and sent on their ways with a white cane. My cane was fun to bounce when I walked, but I didn't see any particular use for it."

Believing that using a cane or guidedog wasn't practical for him, Barber decided to find ways to make the fullest possible use of his remaining vision. Since the rehabilitation services of that time were geared toward treating the visually impaired as if they were totally blind, Barber's decision placed his rehabilitation squarely on his own shoulders. In the beginning, he sometimes found himself bucking the advice of the "experts" as he searched for ways to live a full life with his five percent vision.

Even though several doctors had told him that glasses could never help,





"Get Into A Good Profession"

Why Be A Lab Assistant When You Can Be A Scientist?

Barber wasn't convinced. "When someone tells me something can't be done, I tend to get curious," he says. A born tinkerer, he began experimenting with the lenses he found in an old pair of World War II binoculars. "By using the lenses and putting my face very close to the page, I discovered I could read."

Since that discovery, Barber has designed several specially ground lenses that allow him to read at the rate of about 50-75 words a minute. By putting his face very close to the page and using a thick felt marker, he is also able to write, and quips, "People can always tell when I've been writing because the tip of my nose gets inky."

Using his own lenses and the assistance of readers provided by the Oregon State Commission for the Blind, Barber completed high school and went on to earn a degree in physics from Oregon State University in 1957. Many of his college expenses were paid for by summer and part-time work as a warehouseman, and Barber is convinced that work of some kind is vital to the success of visually handicapped people. "A Federal survey shows that 70 percent of working-age legally blind people do nothing at all," he says. "It's an unbelieveable tragedy." In an attempt to change this situation, Barber frequently speaks at career seminars for handicapped students. "I tell them to focus on getting into a good profession, and that many other problems will take care of themselves."

Barber's own profession as a laboratory physicist was an unusual career choice for a legally blind person in the 1950's. Even though several counselors suggested he would be better off becoming a laboratory technician because of his severely limited vision, he was determined to become a professional scientist. Barber's job search after graduating from college was made even more difficult by the fact that there were no programs for hiring handicapped workers.

When he was under consideration for the job of physicist trainee at the U.S. Army laboratory where he now works, he was required to take an employment physical. Barber still remembers the consternation of the doctor who gave him the examination.

"He didn't know how to describe my handicap without ruining my job chances," he recalls. "I think he finally settled on calling my vision 'very poor,' which was a bit of an understatement."

Understatement or not, Barber got the job and has gone on to become an expert in the highly technical field of remote atmospheric sensing. While he doesn't believe that limited vision hampered his professional achievements, Barber says he probably had to work harder than others to prove his competence in those early years. "Some people were afraid I would hurt myself or someone else in the laboratory. For years I was refused permission to travel alone because my superiors were certain I would get lost or board the wrong airplane."

He didn't know how to describe my handicap without ruining my job chances. He finally called my vision 'very poor.'

But those days are behind him now. Barber has a perfect safety record in the laboratory and frequently travels alone to attend scientific conferences or participate in field experiments in other parts of the country. Says one scientist colleague, "He manages to function so well in his work environment that it takes substantial contact with him to realize how little he can see."

In many cases, Barber's adaptations to his work environment have required no special materials or equipment. When he needs to sketch a design for a new laboratory device, for example, he uses a felt marker and poster-size paper. "My drawings may not be fancy," he claims, "but they get the job done."

Getting the job done has also been the basis for some of the technical adaptations Barber has made to his work environment. To help himself see electronic parts and small-print scientific material, he has put together a

closed-circuit television system that uses a high-resolution TV camera to project this material to a size he can easily see.

While this system was designed for laboratory use, he recently helped develop a less expensive, closed-circuit television system for a visually handicapped friend. Costing around $300 to build, the system uses an inexpensive TV camera to project written material onto an ordinary television screen. After focusing the camera on a page of paper inserted into a typewriter, a person using the system moves the printed words across the screen by hitting the typewriter's space bar.

The arrival of the computer has simplified the professional lives of visually handicapped scientists like Ted Barber. Formerly, Barber required the assistance of a reader to keep up with the vast amount of technical material published in his field. He now accomplishes this part of his job by using a computerized reading machine that translates a written page into speech.

Nevertheless, using computers can pose special problems for visually handicapped people. "Most people with limited vision can type in information on a computer keyboard terminal," Barber explains. "But editing or changing the information they enter is difficult because of the small-size print used on most computer video screens."

Since he frequently needs to use a computer in his work, Barber solved these problems by working with a colleague to program a large-screen computer terminal to display and print enlarged letters. "The program has made it possible and convenient for me to work with the computer," he says.

While Barber enjoys the challenges of his work in the laboratory, he also continues to enjoy the challenges of the outdoors. A Boy Scout leader for the last 18 years, he frequently takes scouts on wilderness trips that would test the endurance of most sighted people. Barber, however, has no hesitation at all about setting out on these expeditions. "It's just a question of teamwork," he explains. "I know my scouts can see well, and I can see partial shapes. I try to stay seven to ten feet behind the last scout, and as long as I can see him, it's enough."

Barber, who recently returned to school to earn a graduate degree in chemistry, offers these final words of advice for other handicapped people: "Be persistent. Get out and give life a try or you'll never know what you can accomplish." Giving life a try, according to Ted Barber, is exactly what rehabilitation is all about.

—Linda Garvey

Ms. Garvey is a free-lance writer.

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FELLOWSHIP HOUS
eryone has something to

Jobs Are Important

Independent Living and Mental Illness

> "This coming year I plan to continue at Fellowship House and spend time doing things that could help me find a career. Perhaps I could go to school and take classes. I'd also like to earn some money by getting a job."
>
> —Leonard

For hundreds of mentally ill persons in Florida, Fellowship House means home, work, training and a chance to prepare for the demands of independent living in the community. Fellowship House is not a single program, not even a single building. Instead, a network of counseling, socialization, job training, transitional employment, and residential programs comprise Fellowship House. These programs occur at different locations in the community and under varying degrees of supervision.

Last year, some 600 mentally ill persons used the services and support of Fellowship House. Some used the program on a walk-in basis, others resided in one of three available living arrangements. Since Fellowship House began in 1973, many people have reduced their reliance on the House, some completely. But for all, the project remains flexible to use when they need to find assistance that is dignifying and effective.

A unique characteristic of Fellowship House that accounts in part for its size and success is flexibility. This is evident in the variety of programs and living arrangements. But most importantly, flexibility extends to the relationship between a mentally ill person and a service professional —and to the image of disabled persons.

Consider this:

—A mentally ill participant at Fellowship House is not called a "client"—he or she is a "member."

—In the weekly newsletter, the amount of space devoted to members equals the space devoted to the concerns of the professional staff. Members write and produce the weekly paper.

—At the project's main building, members and staff share dining facilities—in fact, no areas of any kind are off limits to members.

—Professionals regularly perform job tasks at which members are trained, and substitute for members as emergencies arise.

This unique "working together" philosophy of Fellowship House eliminates much of the institutional atmosphere in which even the more humane State facilities surround mentally ill persons. At the House, artificial barriers between staff and members do not exist. Furthermore the "patient model" of disability does not apply; emphasis at the House is not on "how to get well," but "how to get along" in society. To attain this goal, three objectives underlay the Fellowship House program: work, independent living, and sharing responsibility for one's own life.

Fellowship House's main building is a refurbished warehouse on a highway in South Miami, practically next door to the University of Miami. But House programs reach into all areas of Miami. Residences for mentally ill persons are scattered throughout the city. A new smaller duplicate of the House is located in Fort Lauderdale, Florida. Some of the people who use the program of the House live with their families, while others live in boarding houses, in apartments, even in State institutions.

Who are the members of the House? They are people who have trouble fitting into society—who have personalities that often don't win social approval.

They can become angry, or despondent, or fearful, or withdrawn, to name four common indications of mental illness. These reactions, moreover, are to some degree difficult to control, which impedes and even sometimes destroys a person's ability to be responsible for him or herself and to live independently. If the House didn't exist, many members would be wandering the streets or in State institutions. The year before participating in the House, half of the project's current members were institutionalized an

"I'm going to graduate from college. I'm majoring in computer programming. A year ago, when I first started coming to Fellowship House, it was a very dim light that was shining in my life. . . I'm here today, a year later, and I'm singing a different tune."

—James

average of two months. In fact, some members are involved with the House only during the day and return each night to State institutions.

Society's attitude toward mentally ill persons is intensely negative in character. Among all disabled persons, mentally ill people are often the most severely "doubly handicapped" by a public which finds them unpleasant and intimidating—and expects any relationship with a mentally ill person to be difficult. Mental illness is highly stigmatized, and popular presentations of mentally ill people underscore not only fear and aversion, but also danger.

A more realistic appraisal of mental illness is a comparison made by a speaker at a meeting of the National Alliance for the Mentally Ill. The speaker described mental illness as "a condition like diabetes. You seek to control mental illness just as you seek to control diabetes. If controlled, you don't need or expect to 'get over' either condition, for you can function and live independently."

This healthy, nonthreatening outlook is the basis of Fellowship House's approach to its members. It is a welcoming, nurturing place where members can make mistakes, where disappointments are shared, and where a lack of progress does not signal being thrown into the street. The House doesn't portray mental illness as "bad" as opposed to "good" behavior.

There is never an absolute commandment to "change thy ways." Instead the staff supports a member's own efforts to change a behavior pattern or to learn a new job or living skill. Each member, as fully as possible, participates in the decisions affecting his or her own life and future. Because the professionals staffing the House know that they cannot be with the member the rest of the member's life, they assist the individual take charge of his or her own destiny.

Ideally, as members participate in different programs at Fellowship House, their control over their disability grows. Many new members barely cope with a social program designed to break through the isolation common to mentally ill people. Activities range from creative writing, sports, movies, and crafts to discussion groups, community events, pot luck suppers, and a weekly Saturday night coffee house. Members help to choose activities at a weekly planning session, cook for party meals, and do other chores connected with these activities. The goal is to help members relax and enjoy, to use the social skills they have, and to develop new ones.

Emphasis On Employment

To members who are comfortable with the social program, the House offers vocational opportunities at the main building during the day. There is real work to be done in operating the House and the plan behind the vocational program emphasizes that tasks which members perform not be "make" work, but actually contribute to the success of programs at the House.

- Members participating in food service tasks prepare and serve low cost meals to members and staff, Monday through Friday. Work includes planning menus, cooking, serving, shopping, cleaning the kitchen and dining room, and operating the cash register.
- Members can work with video tape equipment while producing a daily video taped news and magazine program. The trainees interview new House members and visitors, discuss the latest world news, and cover special events of interest to the House.
- Another program, in light clerical skills, produces the newsletter, does bulk mailings for other community nonprofit organizations, and handles much of the House's typing and mimeographing. A research/data collection program handles the majority of the House's statistical work and the preparation of monthly reports to agencies supporting the House financially.
- A maintenance program has responsibility for the upkeep of the House's main building. In the industrial program, members work at light painting and carpentry tasks. They repair furniture and produce household items needed at the House. There is also a plant care and landscaping club.
- Finally, another program educates and trains people interested in opening rehabilitation centers like Fellowship House in other communities. In this program members offer guided tours, work in the library, compile training statistics, research information requests, and learn in depth about the operation of the Fellowship House model.

Delivery at the Bottom Line: Low Costs and Less Hospitalization

No publically-supported program today, regardless of the nobility of its goal, can avoid public accountability. Do the means justify the ends? Are there real cost benefits? Fellowship House is under the same scrutiny as other publically supported programs. How well does Fellowship House stand up to this scrutiny?

A House study of 341 members served by the House for at least six months showed a decrease of 87.8% in days hospitalized following involvement in House programs. Days of hospitalization per member for the year prior to involvement was 56.2. This dropped to 6.9 days in the following year, a reduction of 49.3 days for each member served.

Fellowship House has an annual operating budget of $1.5 million. Costs per member at Fellowship House average $8.23 a day (based on 500 members) compared to over $150 per person average day of hospitalization.

Members participating in Fellowship House's transitional employment are currently earning at the rate of $100,000 annually. An additional 20% of current members have found jobs in the private sector and are tax payers rather than recipients of tax dollars.

While all this work goes on, where, you might ask, is the House's professional staff? They are working alongside members in the training programs. They are out with members shopping for food, seeking donations for the House, and soliciting work for the House's transitional employment program. They are also washing dishes, planting vegetables and typing. They work alongside members, not as superiors, but as fellow workers.

This unusual relationship is maintained by people who are trained professionals, but who have dispensed with traditional professional/client roles. The staff even shed their master's degrees in social work in the transitional jobs (busing tables in a cafeteria or bagging market groceries, for instance) for three days before teaching them to members. Transitional jobs are therefore well taught to, and well learned by, House members before staff professionals pull back and leave members on half-time jobs contracted to last from three to nine months.

Before a member leaves a transitional job, possibly for better paying and full-time employment, he or she helps train another member to take over that transitional position. All the while, members attend weekly meetings at the House with other transitional employment workers. They all share problems and indications of progress, and this helps build self-confidence and buttress self-esteem.

The flexibility that is characteristic of Fellowship House is evident even within the transitional employment program. Both individual placements, where a member is virtually on his or her own, are available as well as group

> **"I was accepted in a City of Miami program and they are putting me through college to study child care—just what I've always wanted to do. I've changed so much. I've got a lot of confidence just knowing that I've finally got my head together and know what I want to do with my life."**
>
> **—Evelyn**

placements. In a group placement, six to twelve members work at the same time on the same job site with a staff member always present. But whatever the situation, transitional jobs offer members real pay and a reference from an employer after the work is successfully completed. Members can have as many transitional employment jobs as they need to increase their vocational skills and prepare themselves for fully self-sustaining employment.

Choice In Housing

A crucial resource supporting the successful employment of mentally ill persons is housing. Why is housing a problem, you might ask, for people with full mobility and use of their communication senses? Despite an absence of physical disabilities, mentally ill people often experience great difficulty with housing. For one thing, mentally ill people have little or no income. For another, they paradoxically have trouble managing to live both alone and with other people.

To strengthen members' abilities to successfully manage their housing needs, Fellowship House offers three different, flexible residential opportunities, each designed for a different degree of independence. First, Fellowship Manor, a group house, provides members with professional supervision and constant support. On a 24-hour basis, staff supervise both the premises and an intensive program in living and personal skills. Together members cook, wash dishes, clean the residence, and maintain the garden while residing in the Manor for six months or longer and improving their skills in independent living.

More independence is provided in the supervised apartment program. In each apartment in a complex of seven units, up to four members reside and enhance their living skills and ability to get along with others. A staff professional lives in an eighth apartment in the complex and assists members in each apartment clean and do other chores. This professional also helps members work out transportation to and from their job sites and other problems of daily living. Again, members stay for about six months and, if successful, can choose to move to a satellite apartment.

Satellite apartments, the third living arrangement available at Fellowship House, are located throughout the Miami area. Members must be able to live without on-site supervision, to pay bills, to get along with roommates, and to maintain the apartment. Twenty-four hour staff assistance is available, but only by telephone.

The diversity of the housing program at Fellowship House accommodates mentally ill persons with a wide range of abilities and needs. One requirement for all members, nevertheless, is worthy of highlighting: Work. Before participating in any of the three living arrangements at the House, members must also be involved in a Fellowship House vocational program, transitional employment, or some productive activity such as school, job training, or an outside job.

A Philosophy That Supports Independence

Fellowship's House's director is Marshall Rubin, dynamic, energetic, and able to attract a staff as dedicated and creative as is he. He is largely why the House is a national leader in community care for mentally ill people.

"One of our guiding principles," says Rubin, "is to strive toward normalization. Our services should be delivered in a manner that is consistent with culturally normative methods and settings; that reduces stigma; and that creates roles for members that are consistent with adult functioning in the community. The title 'psycho-social rehabilitation center' carries a stigma with it. It is much easier to identify as a member of Fellowship House and thus achieve a little more distance from patient status. Increasingly, I have more comfortably referred to Fellowship House as a settlement house.

"Settlement Houses and settlement workers preceded the formalization of social work as a profession. The settlement house movement coincided with a shift by charity organizations in the late 1800's and early 1900's from a philosophy of 'alms to the worthy' to 'helping people help themselves' . . . settlement houses assisted large numbers of new immigrants to become functioning members of their communities.

"Persons leaving mental institutions can be thought of in much the same manner as the new immigrants of the late 19th and early 20th centuries. Both groups have had to face an initial community response of 'they are different, who needs them, send them back.' Fortunately, the settlement house response was 'we need and want you, come join us.'"

Rubin's message is fresh and urgent, not only for the mentally ill members of Fellowship House, but for all providers and recipients of services for handicapped people. In identifying his approach as that of the "settlement house," Rubin recognizes the importance of the adult person. This is the crux of Fellowship House—adults working together with other adults.

The Future of the House

Although not widely recognized, the incidence of mental illness in the United States is nearly epidemic. Because the current trend is for mentally ill people to come out of "family closets" and State institutions, the demand for community mental health services will grow. Fellowship House's budget is $1.5 million annually and it must compete vigorously for funding.

Marshall Rubin speaks to the future of Fellowship House. "It is important to be able to develop as broad a range of financial support as possible. This includes both private and public support. Agencies that depend on a limited scope of support are certainly more vulnerable to financial distress. Fellowship House must conduct itself as a good business if we are to expand and maintain our support base."

The House's development includes seeking major contributions from the private sector. Since mental illness knows no boundaries and affects people from all educational, religious, social, and economic backgrounds, Fellowship House offers a valuable asset to the Miami community, Still, the agency is realistic about the public's aversion to mental illness. Says one corporate member of the Fellowship House board, "Mental health problems do not bring out the enthusiasm often associated with programs having a more concrete 'sales angle.'" Yet the board member continues that he is successfully attracting corporate funds for the House—"It's good for our image, and a good image is good business."

Fellowship House has also started business ventures. One venture, a professional training program, brings in money—and also encourages the establishment of more centers like Fellowship House. Sixteen States have shown interest in the House and its philosophy of assisting mentally ill persons and have hired House staff as consultants. Florida has opened eleven similar houses throughout the State.

The psycho-social rehabilitation movement is a quiet one. Perhaps it escapes public attention because of its awkward name. Equally at cause is that mentally ill people still bear the traditional burden of being "out of sight and out of mind." While the independent living movement for physically handicapped people has gained public attention and acceptance psycho-social rehabilitation centers slip along, out of the glare of publicity.

Another reason for this lack of attention is the absence of leaders and advocates emerging from the ranks of mentally ill people. While the physically handicapped movement has produced articulate and forceful consumer leaders, who are at home on television talk shows and in legislative halls, mentally ill people have been represented by and large by professionals and family members.

This is changing. The National Alliance for the Mentally Ill is identifying a mentally ill leadership. At the same time, mentally ill people are realizing they too have rights which should not be abridged because of their disability. Psycho-social rehabilitation centers are supporting and encouraging mentally ill people to take charge of their own lives and to speak out in public forums. The continuation of these programs is crucial to the growth of independence of mentally ill persons. Fellowship House is leading the way.

—Robert Ruffner

Mr. Ruffner is director of the Communications division of the President's Committee.

Training Materials

Under a grant from the U.S. Department of Education, Fellowship House is producing videotape training packages to comprehensively train and technically assist groups interested in psycho-social rehabilitation centers. Tapes will soon be available from the Fellowship House, 5711 South Dixie Highway, South Miami, Florida 33143.

The videotape packages cover important areas such as social programs, case management, community relations, transitional employment, and other topics. House members have an active role in producing these tapes, which offer the viewer training models and stimulating ideas for adaptation.

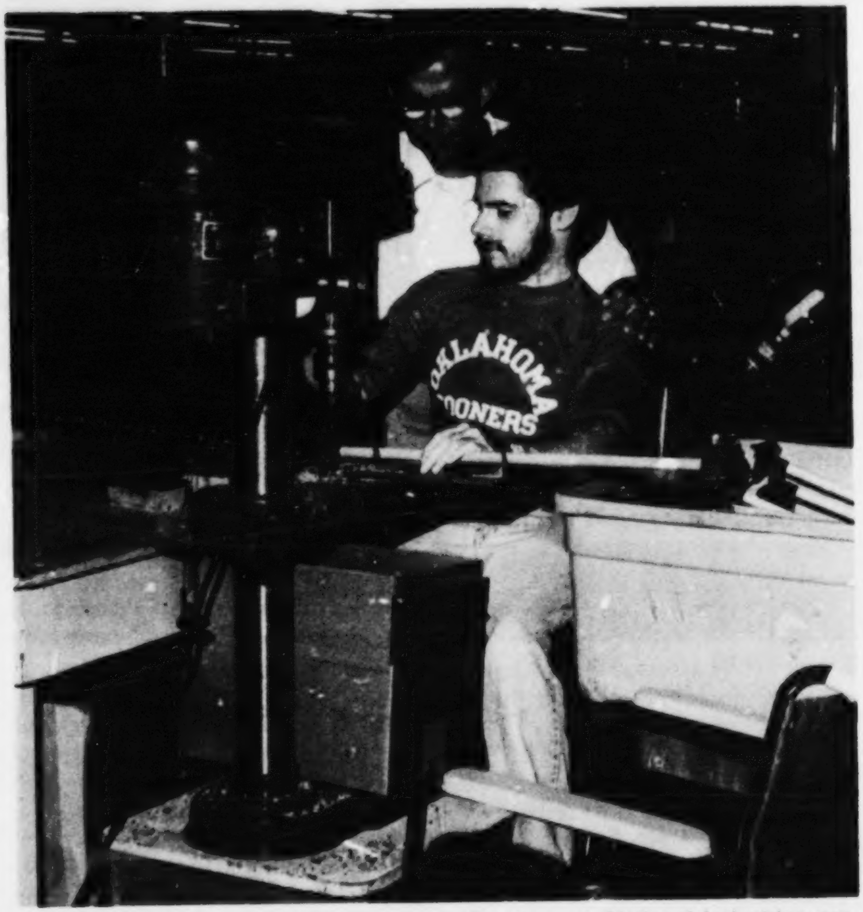
Blind Plus Other Impairments

People Are Working

The late Helen Keller often said, "The curse of the blind is not blindness but idleness." This belief led her to devote her personal and professional life to proving that blind and deaf-blind people can achieve what was once thought impossible. Today, many blind people are far from idle, and work alongside sighted peers in offices, schools and factories.

At the turn of the century, workshops for blind people offered the only avenue for jobs to visually impaired persons. But today, private sector employers are more inclined to hire the visually handicapped. This positive change has had a powerful effect on workshop programs—workshops have opened up to multihandicapped blind people. These are people who are visually impaired and also handicapped by deafness, a mobility impairment, a mental disability, or a combination of these.

In the early seventies, National Industries for the Blind—and its associated agencies with workshop programs—recognized this trend in the workshop population. As more and more deaf-blind persons, mentally retarded blind persons, and blind people with physical disabilities began seeking rehabilitation services, workshops began making accommodations to meet the employment needs of these people.



One way in which workshops associated with National Industries responded to the challenge of employing multihandicapped blind people was through selecting new types of products to manufacture. These products would be sold to the federal government under the Javits-Wagner-O'Day program and could be made by people with limited work abilities. Manufacturing a simple household tool such as a window scraper is one example.

Often the manufacture of other new products, like plastic clothes pins, involves the use of automated machinery. Tending the machines operating a highly automated production process is a job particularly well-suited for deaf-blind individuals and other multihandicapped blind persons. Many have achieved successful job performance.

In order to provide jobs for multihandicapped blind people, many workshops associated with National Industries have started work activities centers. These centers provide work opportunities for people whose productivity on the job is very low. Activities centers complement the other employment programs at workshops and allow upward or vertical job mobility to all workers, regardless of the severity of their handicaps.

For its part, National Industries provides workshops with a variety of engineering assistance, modifying, for instance, production machines with jigging or fixturing to accommodate severely disabled workers. Also, the Rehabilitation Service Division of National Industries helps to develop evaluation and training programs for workshop workers and managers. Conducting research to help design new equipment that will improve the job performance of production employees is another activity of this division. Finally, many associated workshops use electromechanical work samples and other types of work samples developed by National Industries to evaluate and to strengthen a worker's job abilities.

New ideas are constantly being developed and improved and have resulted in employing more than 2770 multihandicapped blind people in fiscal year 1981. This represents 51% of the total blind labor work force in all National Industries associated workshops. As this percentage is expected to increase in the years to come, National Industries and its member agencies are committed to meeting the employment needs of severely disabled blind persons.

The expertise of trained counselors, trainers, and work evaluators will also be needed. Workshops must also develop more partnerships with agencies serving other disabled persons. But during the planning for the future, care must be taken to set realistic performance levels for multihandicapped blind persons and to assure that they receive highly individualized attention.

These measures are necessary and their implementation crucial. But new supportive services place a financial strain on most workshops, especially in this time of cutbacks in the federal budget. Many programs serving the employment of multihandicapped blind people must rely on the productivity of their workshops to financially maintain the entire agency.

In order to meet production schedules and to satisfy customers, and still provide rehabilitation opportunities for its work force, a workshop must function as cost effectively (or even more so) than other private, for profit manufacturers.

Paying wages according to a worker's productivity is one way workshops try to achieve cost effectiveness, even though some workers as a result earn below minimum wage. National Industries supports this practice (which is permitted under the Fair Labor Standards Act) and recommends using a wage standard comparable to private industry. This practice is especially appropriate in light of how workshops are serving an ever-increasing number of multihandicapped blind persons. Paying every worker or client equally—regardless of productive ability—would force workshops to lay off the least productive workers in order to stay in business.

The group that would suffer the most from this course of action would be multihandicapped blind persons. Ironically for these people, workshops are the only practical source of employment. Finally, National Industries believes that paying all workers equal wages would have a negative effect on individual incentive because it would eliminate a monetary reward for improving job performance.

During 44 years of operation, National Industries for the Blind has remained steadfast to its mission of providing industrial jobs for every blind man or woman who wants to work, regardless of the severity of the handicap. Through the business opportunities of the Javits-Wagner-O'Day Act (which has made possible thousands of industrial jobs for disabled persons), agencies associated with National Industries will continue to serve the vocational needs of multi- handicapped blind people. As long as there are blind people who can and want to work and who cannot obtain jobs in private industry, there will be a need for workshops.

—Harold Richterman

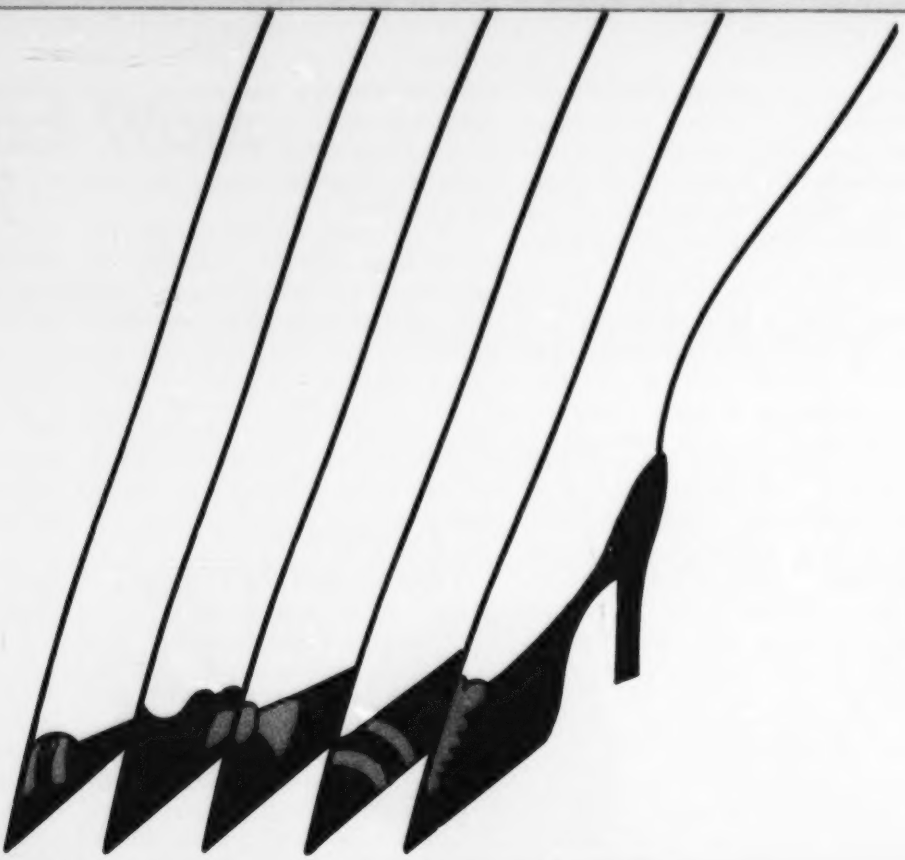
Mr. Richterman is the director of Rehabilitation Services at National Industries for the Blind, headquartered in Wayne, New Jersey.

In 1938 National Industries for the Blind was established as a result of the Wagner-O'Day Act, federal legislation which sought to organize the allocation of certain government contracts to workshops employing blind people. In 1971, the Act was amended (and is now called the Javits-Wagner-O'Day Act) so that a second and separate organization, the National Institute for the Severely Handicapped, could help allocate contracts to workshops employing nonblind workers.

At the federal level, the Commission for the Purchase from the Blind and Other Severely Handicapped regulates the program established under the 1938 legislation, as amended.

In 1981, over $150 million in federal contracts were awarded to workshop programs. Disabled workers manufactured ball point pens, hospital gowns, and aluminimum step ladders (among other products), and supplied services such as operating a food service for the Veterans Administration and handling laundry at a Defense Department facility.

—Robert Gorski



High Heels

In 1962, while working as librarian with the U.S. Army in Korea, I took a vacation in Japan. During a Japanese tea ceremony, I discovered I could not kneel properly. The problem turned out to be a malignant bone tumor in my right leg. Ultimately, the tumor necessitated an above the knee amputation.

At the time of the operation, I was concerned that no one would stand to look at me until I was fitted with an artificial limb. I had faith, however, that the replacement limb would be indiscernably lifelike; that my walk would be absolutely normal; and that I would have no more problems. But the prosthesis industry was not up to the challenge. Ever since 1962, wearing a prosthetic leg has been a constant frustration, more exasperating than the amputation itself or the limitations it put on my mobility and lifestyle.

For me as a woman it is important to wear shoes with varying heel heights. (Wearing heels was one of my primary concerns from the beginning. It seems I even babbled about heels in the recovery room after the amputation.) Usually a prosthesis is made to fit into only one of the shoes in a person's wardrobe. So, along with my first artificial limb, I had to have several shanks of different heel heights that attached to the mechanical knee joint.

The Assistive Aid Is the Barrier

To change shanks required only a Russel screwdriver, but I am not mechanically talented. Many a time I have called a friend to say I would be late—because I was still trying to change shanks. But this is just the tip of an iceberg.

A More Serious Problem

As a matter of fact, one of every five persons with a leg amputation has serious problems with prostheses that are uncomfortable and even painful to wear. At fault is not the disability, but artificial limbs that are not skillfully designed and fitted. No one in the industry seems able to fit these amputees properly.

The book, *Whole Again*, by Lee Whipple, recounts a horrifying search by one amputee, Bill Barr, for a prosthesis that would not cause him excruciating pain. Over a period of eight years, Barr spent tens of thousands of dollars in consulting uncounted doctors and prosthetists and having several operations. Finally, he met Jan Stokosa, a young prosthetist, whose meticulous care and advanced designs and fitting procedures allowed Barr to walk and to work in comfort.

Stokosa's limbs can cost triple what is charged elsewhere—$6,000 to $8,000 compared to $1,500 to $2,000 for an above the knee limb. Yet, Stokosa's clinic in Lansing, Michigan, has a two-year waiting list. This fact speaks eloquently about the frustration that the amputee population has with the prosthetics industry.

While I have not undergone the agonies Barr experienced, I can recite my share of horror stories. I have had five prosthetists on both the east and the west coasts, and I have found great variances in workmanship and attitude. Until one joins the above knee amputee group, one is totally unaware of the problems in fitting an above knee prosthesis.

What Makes It Difficult

Most importantly, there is a limit to how much soft tissue of the "modilimb" (a word coined by Lenor Madruga, an amputee who does not like the word "stump") can be compacted in a total contact-type socket. Judging how much to allow for compacting is one of the most important decisions a prosthetist makes. If one doesn't get this correct, serious irritation, circulatory troubles, and lost of fit can result.

(Maintaining a good fit also requires that one's weight not vary by over five pounds. For me, dieting is a constant discipline even though I am four feet eleven inches tall and weigh 99 pounds.)

One other frustration with artificial limbs occurs each time I put on my leg. Only with socket, knee, and shank in precise alignment will the leg be comfortable. There is no room for error. But even when aligned correctly in the morning, the socket can change position during the day as the soft tissue of the modilimb shifts. Comfort and a good gait demand that a prosthetist be knowledgeable about anatomy and physiology and have the utmost in patience and craftsmanship.

Yet the attitude permeating the prosthetics profession fits the image of a market place rather than a medical service. For example, just recently a prosthetist in New Jersey recommended a swivel ankle that has since given me a secure feeling when I walk over uneven ground. Wondering why my previous prosthetist had not mentioned this to me, I called the firm and asked about a swivel ankle. As I sat at the phone with the swivel ankle on my limb, I was told that such ankles were not made in my size.

Often, attention is not paid to little matters such as resurfacing a leg when repairwork scratches or in some other way mars the leg's appearance. Such scars on a natural leg would never be tolerated by a patient or a caring physician. An amputee should have the same privilege.

Very frustrated and unfortunate is the above knee amputee needing repairwork on the knee joint, or a new knee. Most artificial knees are manufactured on the west coast, and only the manufacturers are allowed to repair them. A simple solution would be for every amputee to have a spare leg, but legs are expensive for the individual, and insurance companies won't pay for duplicates.

Doctors Are Part of the Problem

The medical profession bears a share of the blame for what amputees go through. Although insurance practices require a person wanting a prosthesis to first obtain a prescription from an orthopedic surgeon, the average surgeon is unfamiliar with the fitting and the design features of prostheses. Once, a surgeon from whom I was requesting a prescription had to call the prosthetist to find out what the prescription should say.

I will always remember the time I visited an orthopedic clinic in a well-regarded teaching hospital. At the time, I was having irritation in my modilimb, and the doctor asked me how many stump socks I wore. Before we went any further, I explained to this specialist that users of total contact sockets do not wear stump socks.

In the minds of many surgeons the attitude is "We saved your life, what more do you want?" My present prosthetist informs me that many clients come to him after release by a doctor without referral or advice on available equipment. The information some amputees do get is woefully inadequate. In her candid book, *One Step At A Time*, Lenor Madruga relates the story of her amputation. She had a hemipalvectomy—which involves removing part of the hip—and tells of reproaching her doctor for not warning her about how depressing shopping for a leg would be. He replied, "Lenor, I didn't know what would be available for one who had undergone a hemipalvectomy."

Obviously there needs to be more information exchanged between surgeons and the prosthetists who replace what is amputated. For orthopedic doctors more study in medical school about amputation procedures, limb replacement, and prosthetics is also needed.

No adult amputee comes to his or her loss without previously developed interests, and the baggage of prior self-image. Each person has his or her own priorities. My heels may be another amputee's tennis game. Perhaps someday research will discover how to permanently attach a prosthesis or even how to facilitate limb regrowth. Until then I would like to have a leg which allows me to try on shoes of different styles on the same shopping trip, to swim, to climb most any grade, and to wear mini skirts if they come back in style.

—Mary Lilla Browne

Ms. Browne is a free-lance writer. The book about Bill Barr, Whole Again, *by Lee Whipple, is published by Caroline House Publisher, Inc. It is 232 pages in length and costs $9.95. Lenor Madruga's book,* One Step At A Time, *210 pages, is published by McGraw-Hill Book Company and costs $10.95.*

To Walk and Work In Comfort

What It Takes to Make A Prosthesis That Fits Right

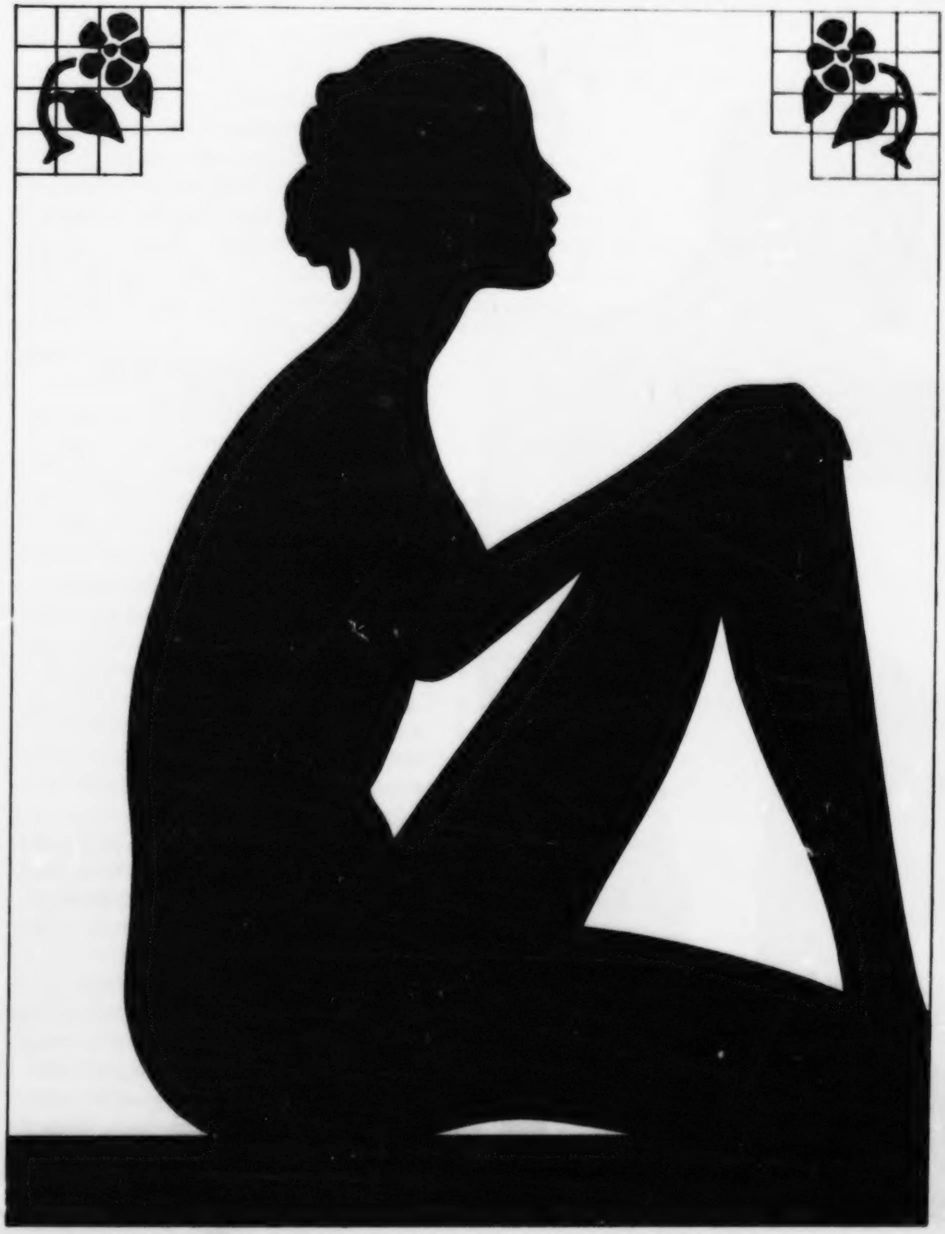
After having a leg amputated because of injury or disease, many people decide to wear a prosthetic leg, feel more or less comfortable with it, and live an active life. A large number—perhaps 20 percent of all people with leg amputations—experience great discomfort wearing an artificial limb, and neither doctors nor prosthetists can clear up the problem. But at a clinic in Lansing, Michigan, many disabled people who have severe problems following a leg amputation find relief and a chance to further their rehabilitation.

According to Jan (pronounced "yawn") Stokosa, director of the Institute for the Advancement of Prosthetics,"Ninety-five percent of my patients come here dissatisfied with their previous care. They are in discomfort—some are in pain—and their mobility is limited. Some have had a series of operations, following the amputation, to correct problems without success.

"Clients come from all parts of the country. Often they have been to four or five other prosthetists. When I read letters of inquiry, I often sense great desperation; writers have even referred to me as a prosthetist of last resort.

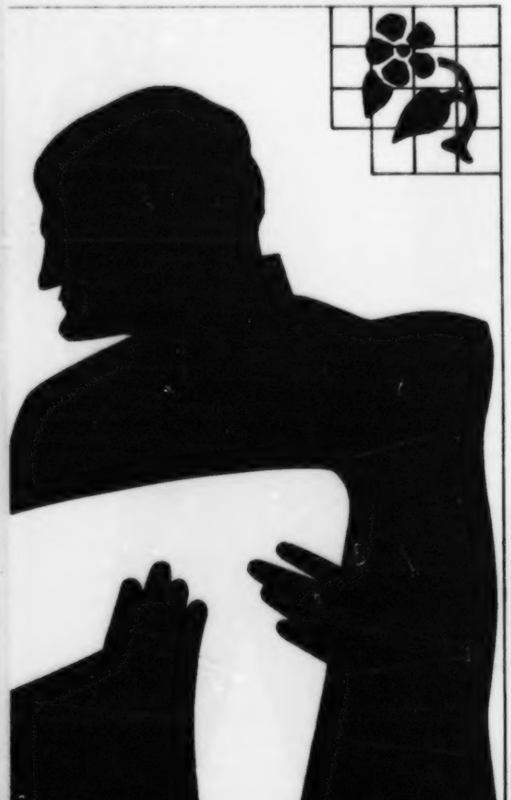
"One person came to my clinic after doctors at the University of Houston hospital told him that they could not relieve his discomfort—they had tried all they could do. This situation is typical with many of my clients."

Subtleties about an amputee's anatomy, muscle tissue, veins, and lymphatic system. The manner in which the client's body carries itself when in motion and at rest. The manner in which the amputation was done. All these and



other elusive factors render fitting artificial limbs to some people—and permitting them a comfortable and active life—beyond the craft of the prosthetics profession as practiced up until now.

At the Institute for the Advancement of Prosthetics, however, Stokosa has attained a remarkable record. "Ninety-nine percent of my clients," he asserts, "show significant improvement" in comfort and mobility when they leave his care. This improvement continues, as shown by written follow-up reports that clients complete six months and one year after treatment at Stokosa's clinic.



Among the success stories so far,

- A wielder in a petroleum field couldn't continue working (inside large oil pipes) with limbs designed and fitted by other prosthetists. With a Stokosa limb, he is back at his old job.
- A professional with a zinc ore firm was going to scale back his travel and on-site inspections of ore fields. Fitted with a Stokosa limb, he continued all his former duties.
- A Vietnam veteran was losing time on his jobs and even being fired because his limb problems required frequent visits to prosthetists, doctors, and druggists. With a Stokosa limb he now works regularly and at a physically demanding profession—training security dogs.

Why is Stokosa succeeding where many other professionals do not? Why have over 5,000 persons, many greatly dissatisfied with limbs from other clinics, contacted him for services? Why does his Institute have a two-year waiting list even though Stokosa limbs cost several times more what is charged elsewhere?

A NEW APPROACH TO PROSTHETICS

Much of the answer lies in Stokosa's clinical techniques. "Only five universities in the United States teach prosthetics," explained Stokosa. "At these schools students learn that, on the leg that remains after an amputation, certain areas can tolerate extra pressure; other areas are too sensitive to tolerate pressure at all. Consequently, after these students graduate, they and apprentices they train design and fit limbs that concentrate a patient's body weight on a few, isolated square inches of the remaining leg."

Even though many professionals use limbs with what are called "total contact sockets," the limbs, said Stokosa, still direct weight and pressure to small areas on the person's leg.

The bodies of some amputees conform to the standard expectations of the profession. But this is not true for all people. For them, "the results," Stokosa claimed, "are sores, obstruction of veins and lymph channels, friction that causes skin problems, and nerves that get short-circuited." People with these problems can experience great limitations in walking, standing, and even sitting down.

Stokosa's approach eliminates many of these problems. The total surface of the remaining leg, he believes, should bear as much pressure as possible. By distributing weight over the greatest area, Stokosa diminishes the pressure at any one point.

A simple idea. Putting it into practice is demanding, however, on both the prosthetist and the disabled person. First of all, Stokosa's approach takes time, usually ten days to two weeks, with every other day and sometimes daily appointments at the Institute for the Advancement of Prosthetics.

During this time, not one or two, but four or five sockets are made and scrapped before one finally satisfies both Stokosa and the disabled person. Testing mainly consists of the disabled person walking and walking and walking while wearing test sockets made of a clear plastic material.

Stokosa and his colleagues observe what happens to the person's stump as the body moves, shifts weight, and alters the patterns of stress on the stump. They also listen to the remarks of the client. Adjustments are made and tried out. The client's walking style is evaluated and improved so that the disabled person controls the artificial limb, not the other way around.

The way in which the amputation was done is also evaluated at the Institute for the Advancement of Prosthetics. In general, Stokosa is dissatisfied with standard techniques of surgical amputation. He maintains that doctors (and the assistants who actually perform most amputations) rarely take into account how the leg that remains will wear a prosthesis and bear considerable weight and pressure when both moving and at rest. With approximately two-thirds of his caseload, Stokosa recommends and gives detailed directions for "revision" surgery to improve an amputee's ability to wear a prosthesis.

The end result of all the analyzing, testing, and other work is an artificial limb highly customized to the subtleties of the disabled person's body and to the person's best gait.

"They are concerned about how you feel. Every little spot of pressure must be gone," said Eugene Kesner, who is in his fifties and a below knee amputee. Wearing an artificial limb and test socket, Kesner had walked numerous times up and down a raised walkway under the watchful eyes of Stokosa and an assistant. The see-through test socket had been dabbed with grease pencil markings as a result of observations made during the fitting appointment.

There would be more walking and more observation, followed by refinements in the test socket. Eventually, it would be discarded altogether and replaced by the next in the series of test sockets. Each one would be more compatible with Kesner's body, the way blood flows in his veins nerves send impulses, tissues stretch, and muscles contract and shift position, all of which changes as the body does different things—sitting, standing, walking slow and fast, and climbing stairs.

All this is a vast contrast with Kesner's previous prosthetist. "I never visited that man's shop. An assistant came to my home and made a plaster mold of my stump. A month later, the technician returned with a finished leg and made only a few fitting adjustments. Here at the Institute, they don't let you go until it is right."

MAKING A DIFFERENCE IN LIVING AND WORKING

Kesner's previous limb was a burden. With it he couldn't stride comfortably, and walking up steps and grades was always difficult. It was cumbersome and heavy.

Moreover, it limited Kesner's ability to work. After retiring from railroad work because of his below knee amputation, Kesner started a small excavation business in his home state of West Virginia. But during the day he only worked for short periods. After an hour or two, whether operating earthmoving equipment or simply sitting still, Kesner felt so much irritation and pain, he stopped working completely and rested.

His prosthetist and doctors were unmoved. Their attitude, he remembered, was "You have to learn to live with it." Kesner was told to "put up with the pain and the sores," the skin infection that cost him $22 a month in medications, and a cyst on his shin which interferred with flexing his leg.

"You don't have to live with it" is the attitude that Kesner felt at the Institute for the Advancement of Prosthetics. Even with the Stokosa limb not fully completed, Kesner knew it was going to greatly enhance his independence. "With the previous limb," he remarked, "after two hours I would trip over a match stick. Now, the longer I walk, the better I feel."

According to Stokosa, this somewhat paradoxical statement is occasionally made by his clients. No charismatic qualities, however, are active in the limb. Instead, Stokosa attributes the sentiment to the fact that a person's previous limb blocked normal body sensations. Now the person feels *better* partly because he or she is now feeling *more*.

Another client at the Institute is Jennifer Miller, a 21-year-old college student from Michigan. She had an above knee amputation on her right leg five years ago. The care and the prosthesis she received at Stokosa's clinic was in many ways far superior, she felt, to what other prosthetists had given her.

Previous limbs needed daily adjustments at first, followed by a period when no problems occurred. But after a few months, discomfort started again and increased. These limbs also wore poorly; the end of one even split apart.

Like Kesner, Miller saw striking contrasts between other prosthetists and Stokosa from her earliest appointments at Stokosa's clinic. For one example, at the Institute a plaster cast was made of Miller's right leg all the way to her waist. Never before had anyone shown so thorough an interest in how her body would interact with a prosthesis.

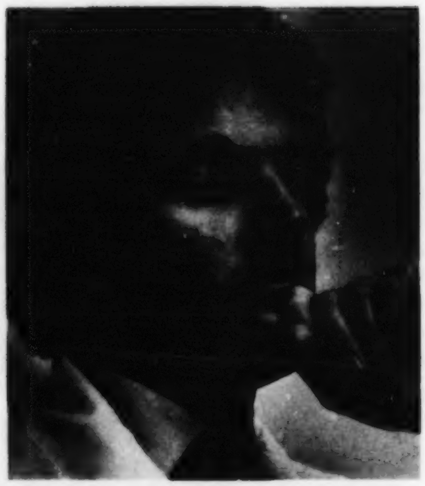
Furthermore, only at the Institute did Miller receive advice on improving her walking gait. Previous prosthetists had mentioned that she was a "lazy walker," but never did anything about it. Stokosa's staff, however, "explained the muscle structure in my leg and how it worked. They instructed me how to improve my walk, for example, by doing an exercise in which I lift my unimpaired leg off the floor and stand solely on my impaired leg.

"I have developed a totally different walk," Miller said, "and can actually walk faster now. In addition, because of my improved muscle development and tone, clothing fits more evenly in back. I am dancing, playing Frisbee, and trying a little tennis."

By giving her new endurance and freedom, the Stokosa limb is making a difference in Miller's employment plans. When she worked at a bank and wore her previous limbs, Miller would frequently develop sores on her leg, even though her job involved mostly desk work. Soreness never forced her to leave work, but she often had to dispense with her limb and get about on crutches. "My crutches are my good friends," Miller said, "but they restrict my independence, particularly my ability to carry things while at work."

Now Miller feels confident that her disability will not impede her work, and especially her ambition to complete college and teach first grade school children. "With the Stokosa limb, I don't think about physical limitations. Perhaps there are some, but right now I am not aware of them."

Ninety-nine percent of his clients show significant improvement in comfort and mobility when they leave his care.



A DIFFERENT APPROACH TO PEOPLE

According to Miller, another element in the superior care at Stokosa's clinic was attention to the personal aspects of wearing a prosthetic leg. Previous professionals, for example, had recommended that Miller diet down to a low weight in order to tolerate an artificial limb. Not ony was the weight difficult to maintain, but Miller was already a petite-sized person. At Stokosa's clinic, Miller's weight was not an issue. Instead the staff focused on getting the limb to fit Miller, not the other way around.

Indeed, the Stokosa limb even matches her unimpaired leg in shape, tone, and color—and (at Miller's request) it has toes like her natural foot so that she can wear open-toe shoes when she wants. In fact, in contrast with many other professionals, Stokosa does not design limbs for only one pair or type of shoes. When Miller began her lengthy series of fitting appointments, she was encouraged to bring many shoes with her so that the limb could be designed to fit them all.

Attention to the individual is a strong point at the Institute because in Stokosa's words, "I and my staff are anxious and excited to do whatever we can. This even includes lengthy discussions with patients regarding the treatment program." Discussions occur because Stokosa wants his clients to be enthusiastic about the program and participate in the fitting of their prostheses.

When he occasionally encounters a client with a difficult attitude toward the treatment program, Stokosa characteristically wants to turn that attitude around before proceeding. Once a man was very uncooperative during fitting appointments. Stokosa felt the man was stubbornly confusing his prosthetic problems with other health difficulties which, sadly, he had in abundance.

As he described it, Stokosa "got rigid with him" and the firmness paid off. The man stopped seeing his amputation as the focus of his health problems. In fact, a reversal of sorts occurred, and the man's appointments at the Institute and the progress in fitting the prosthesis became a source of satisfaction and well-being for him.

With another client, Stokosa took a different tact. This client, a woman, also had numerous health problems, plus difficulty with her employer, the U.S. Postal Service, over maintaining her job. During appointments at the Institute, the woman was becoming increasingly depressed and uncommunicative. Finally, Stokosa told her she could stop the appointments, but he wanted to know what she felt was going wrong.

Stokosa spent a half hour with her. As a result, she developed a more positive and willing attitude toward fitting the prosthesis. In fact, at Stokosa's request, the woman now talks with other amputees over the phone about problems related to amputation and how to adjust to them. She has become an effective peer counselor, and this has further improved her self-image.

Professionals who serve Stokosa's clients also occasionally benefit from the Institute's attention to people. Once, an insurance carrier was questioning why a disabled beneficiary should be covered for the Institute's higher prices and for fitting techniques that are nowhere near being common in the prosthetics profession. In response, Stokosa invited a representative from the insurance company to visit the Institute and see for him or herself the quality of Stokosa's work and how it would prevent many future problems related to the amputation from occurring.

THE RENEGADE PROSTHETIST

Since 1978, Stokosa and his staff have helped between 150 and 160 amputees each year. People literally come on canes and crutches and in wheelchairs and leave walking. In many cases, clients have experienced great and prolonged difficulty with other artificial limbs. Stokosa's record would seemingly command the highest respect within the medical industry.

But that is not the case. Consider this: Almost all Stokosa's clients have been *self-referrals*. People either hear about Stokosa from friends and acquaintances, or, as with Jennifer Miller, from a vocational counselor who read about Stokosa in the June 1980 issue of

Reader's Digest. Even after four years of great success, the Institute receives few referrals from doctors and other prosthetists. By and large, Stokosa feels, other professionals shun him and his work.

First of all, the implications of Stokosa's success put many professionals in an unattractive light. Many other prosthetists appear unskilled and haphazard in comparison. Doctors appear ignorant about surgical amputation and callous about their patients' welfare.

Second, Stokosa has openly questioned the standards of quality in his own profession as well as of physicians who perform amputations. Prosthetics, he has stated, should greatly upgrade the education and training required before certification is granted. Clients should have the right to better care, better materials for artificial limbs, and techniques for fitting prostheses should be more exacting and sophisticated.

In Stokosa's view, many doctors are similarly lax in their standards. Furthermore, they are disregarding available knowledge and technology that would minimize the negative impact of amputation on the life of a patient.

Finally, Stokosa believes that his techniques and approach to prosthetics is best-not just for the 20 percent of all amputees who experience great problems wearing artificial limbs—but for the entire amputee population. Even persons more or less comfortable with their prostheses would feel greatly benefited if limbs were designed in the manner done at Stokosa's clinic.

Stokosa's attitude toward his professional colleagues and medical doctors make him a controversial figure within the medical community that treats people in need of or who have had a leg amputation. As already noted, instances in which the medical industry refers clients to Stokosa's Institute are few. Powerful physicians, moreover, appear to be actively stiffling access to Stokosa within professional circles. Several times, Stokosa states, he has been "disinvited" from medical symposiums.

One recent instance of this involved a medical conference in San Diego. An individual helping to plan this conference was enthusiastic about Stokosa's work when the individual invited Stokosa to speak at the conference. Soon afterward, however, the conference planner called again, apologetically, and explained that his superiors had stricken Stokosa from the program, saying "We don't want to hear him speak."

But to consumers, Stokosa's record speaks eloquently. That is why amputees who experience problems with their prostheses continue to contact the Institute for the Advancement of Prosthetics and add themselves to the two-year waiting list. When the medical industry finally comes around to "hearing" this, few, if any, consumers will complain that the doctors are behaving rashly.

—Robert Gorski

Hearing Aid Hall of Fame

A Future Look Into the Past

In the hundred years since Richard S. Rhodes obtained patent number 219,828 for a fan-like device "aiding the deaf to hear" (the Acoustic Fan of 1879), hard of hearing consumers have been offered everything from acoustic shells the size of a fist to transistorized aids the size of a thumbnail.

Some hearing aids, by virtue of their uniqueness or popularity, are destined to occupy a niche in a Hearing Aid Hall of Fame. Future generations of antique connoisseurs and museum curators will avidly bid for possession, while curious or nostalgic souls will yearn for a glance, not just at a jeweled "London Dome" used by British royalty, but also at rusty ear trumpets of the 1800's.

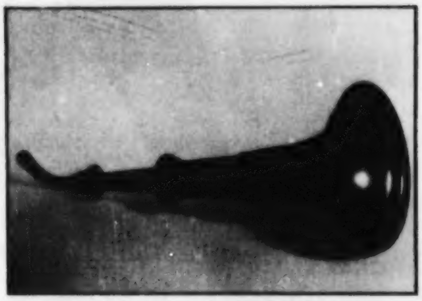
It's reasonable to nominate likely inductees now because future advances in technology may render the hearing aid obsolete. In the future people with a hearing loss will receive implanted microcircuits to replace damaged tissue. Perhaps by the year 2000 a child might be asking a grandparent, "What's that tiny little tan thing in your dusty old computer box?"

The grandparent will smile and say with a wink, "That's the hearing aid I wore in 1982. Now they've got one like it in the Smithsonian!"

Do you know someone who wears or has worn a hearing aid, or are any of your friends interested in antiques or nostalgia? Ask them to name as many different kinds of hearing aids as they can, from past to present. Then show them the pictures in this article and tell them a little about each device. Like a worthy hearing aid, fill them in on what they missed.

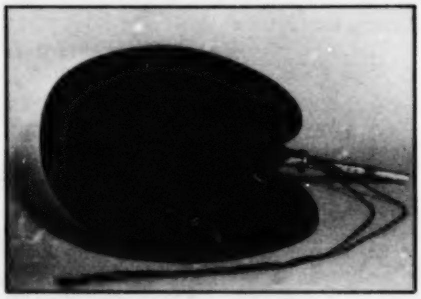
It's possible you may come across some of these hearing aids already reposing in a museum or curio shop. If so, pay silent homage to the inventive minds who, by their initiative and craftsmanship, endeavored to amplify sound to overcome the barriers of deafness; and to the courage of the people who wore the hearing aids, despite stares and taunts.

So hear ye, hear ye! Here's a sneak preview of the Hearing Aid Hall of Fame.



TELESCOPIC EAR TRUMPET (mid-1800's)

For a long time the ear trumpet has symbolized deafness. This particular model (extended length, 10 ½ inches) enabled wearers to fold it up like a monocular telescope and stash it in their coat or whatever. Notice the small curved tip that fits into the ear canal. This allowed the fluted end of the trumpet to face the person speaking. With the speaker's face in full view, the trumpet wearer could utilize whatever lip-reading ability he or she had to understand the speaker better.



ACOUSTIC FAN (ca. 1879)

Capitalizing on the vanity of hard of hearing people, manufacturers offered this Acoustic Fan (sometimes called an Audiphone) since fans were quite popular for ladies around this time.

Ostensibly, a lady with this fan might seem to be anxiously nibbling its edge during a performance of, say, *Othello*. Actually, she was using her teeth to help her hear. Sound waves from the actors' voices struck the fan (made from a sheet of hard, flexible rubber) and traveled as vibrations to the edge of the fan. Cords drew the open fan taut to maintain tension and provide better vibrations, which then traveled from the user's teeth to the inner ear by means of bone conduction.

If you used the Acoustic Fan, it undoubtedly helped to have strong and healthy upper central incisors!

LONDON DOME EAR TRUMPET (ca. 1899)

Made in different sizes depending on the amount of hearing loss, the "London Dome" was a noncollapsing, but compact ear trumpet. The end of the tube usually had a dome of meshes, called refiners, to soften reverberations. Black was the most common color, since it was least conspicuous against black clothing.

The trumpet's shape is similar to the domes on many churches in London, and perhaps observers, seeing a wearer with a peculiarly looking ear trumpet, would remark on its similarity to the domes; thus, the title stuck.

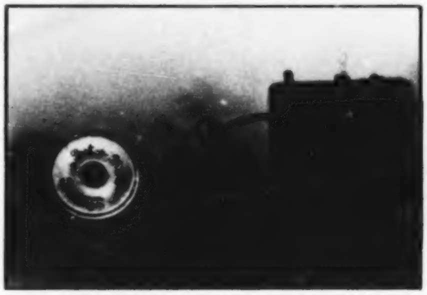
SPEAKING TUBE (late 19th/early 20th centuries)

Holding one end of the tube, a speaker would talk directly into the funnel while the listener held the small tip inserted a little ways into the ear canal.

It was like having a person speaking right by your ear. As long as it wasn't mistaken for a snake, it was certainly helpful, since it could easily bend in the direction of the sound.

EAR SCOOP (ca. 1904)

The ear scoop gathered sound like a hand cupped by the ear. Much less conspicuous than an ear trumpet, the auricles of this monaural model were designed to be attached to a headband. Special wigs and exclusive coiffures, even custom millinery, were available for users of this model.



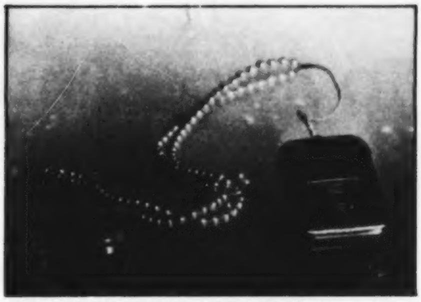
CARBON HEARING AID (ca. 1926)

Hello, power; goodbye, weakness. Following the invention of the telephone in 1876, inventors turned to electricity to amplify sound. While a cupped hand or an ear scoop gave an increase of six to eight decibels, the earliest carbon aids gave an increase of 10 to 15. The last models of the carbon aids produced a gain of about 25 to 30 decibels. Though weighed down by a bulky battery, the wearer could expect to hear much more than ever before.

TRIODE VACUUM TUBE HEARING AID (mid 1940's)

During the 20's, 30's and 40's, invention followed invention. With the vacuum tubes—which depended on several circuits: A cathode, an anode and a grid—hearing aid manufacturers took another step in electronic wizardry.

This 1944 Zenith model was designed to be plugged into a separate battery pack, worn in a special bag, like a shoulder purse.



TRANSISTOR HEARING AIDS (1950's, 1960's)

Finally, an inconspicuous hearing aid—not only powerful, but stable and in a much smaller size. Flesh-colored, body-contoured transistor aids have served hard of hearing and deaf consumers for over a quarter of a century.

Although in the ear or behind the ear models were inconspicuous, in 1952 there was an extra cosmetic feature: A string of pearls hiding the cord of one model was sure to please a demanding clientele.

—G. Thomas Bishop

Mr. Bishop is a photographer and freelance writer.

To Race Through the Snow

Disabled People Are Skiing for Fun and Competition

Without hesitating, Hal O'Leary speaks candidly about handicapped people and skiing. "At Winter Park, we provide handicapped people with confidence and a sense of achievement that helps them to overcome obstacles and attain other accomplishments. Moreover, skiing helps to generate a feeling of belonging and meshing with society. When this feeling happens, both the handicapped person and his or her peers are accepting the person for what he or she is and can do, rather than dwelling on the handicap."

The program which O'Leary supervises began in 1968 as a project of the amputee clinic at Children's Hospital in Denver, Colorado. After two years of success, the project became a permanently established—and free—program at Winter Park Ski School (a commercial winter sports program) with O'Leary in charge. Children and adult amputees came from near and far to this, the only program of its kind, and learned to ski.

The project's growth had a second dimension. With time it became more and more a cross-disability program, and now offers instruction to persons who are blind, deaf, mobility impaired, and mentally retarded. With the inclusion of additional disability groups, the Winter Park program has come to use new kinds of adaptive equipment. This includes various types of modified skis and ski poles, plus fiberglass shell sleds with contoured bottoms and steel runners for edging and control. The sleds are used by mobility impaired persons for skiing in a sitting position (called sit-ski or arroya skiing) and performing in downhill, free-style, slalom, and giant slalom events.

Currently, Winter Park's adapted ski program has a staff of 350 instructors, 15 of whom are full-time paid persons, while the rest are volunteers. The instructors have a broad range of experience in rehabilitation and related fields such as special education, recreation, and physical education. Some instructors are also handicapped.

Because the Winter Park program was generating great interest in adaptive skiing and producing many talented people, an annual competition—the National Handicap Ski Championships—was created in 1972. In each of the last two years, over 300 handicapped skiers participated in competition organized by type and degree of disability. The national championships offer individuals with competitive spirit a chance to show their abilities and their prowess as they race, sometimes in falling snow, at speeds up to 70 miles an hour. The excitement is exhilarating and challenging, and the sense of accomplishment is intense.

One of the faster skiers at Winter Park is Ronald Rowe, whose eyesight is very limited by glaucoma and an eye injury. He is particularly fond of coming down a mountain side because it gives him a feeling of being in a wide open space. In his class at the 1982 Championships, Rowe won gold medals in the 1.5 kilometer and five kilometer cross-country events, plus a silver medal in the slalom.

Rowe came to Hal O'Leary's program with a rudimentary knowledge of skiing, although he had not skied before becoming blind. Well-intentioned friends of Rowe talked him into attempting to ski some years ago at Loveland, Colorado. But they were helpful only in so far as to take Rowe to a mountain top and advise him that he would "know how to ski when he got to the bottom."

It took Rowe all day to reach that goal, but get to the bottom he did. Although he has some vision, he was not able to discern bumps or depressions in the snow, and he learned to keep his knees and legs flexible and to adjust instantly to the changes in the skiing surface.

Shortly after this first adventure with skiing, Rowe heard about the Winter Park program for handicapped persons and enrolled. He is now an accomplished skier and uses a sighted companion only for directional guidance. "Skiing has given me more guts to try other new things," says Rowe, who has degrees from Colorado University and Metropolitan State College in Denver. Presently, he works as a systems engineer.

Seven years ago, when she was twelve, Diana Golden, from Lincoln, Massachusetts, had her right leg amputated because of cancer. She had skied before with her family for fun and on weekends, and when told she was going to lose her leg, she was concerned about two things. "Will I be able to ski and will I be able to ride horses?" she questioned her doctor. When told she could expect to continue these sports, Golden felt better able to face the operation.

After her recuperation Golden went to observe a regional meet of National Handicapped Skiers. The coach for high school-age disabled people met her and invited Golden to train with the other handicapped persons. To the coach it was obvious that Golden had competitive spirit, and soon she was entering handicapped ski championships.

"When I'm on skis," says Golden, "I say to myself, 'What can I do to ski better?' I'm a competitive person. I say to myself, 'Can I ski this course better? Am I looking forward? Am I turning?' All these things come into play.

"I don't think of myself as handicapped anymore. I can do the things that anyone else can do on the slopes." Gold medals in the giant slalom and slalom were her prizes at the 1981 National Championships at Winter Park. At the World Championships in Switzerland, Golden came away with first place in the downhill event and second place in the giant slalom.

One paraplegic entrant in the sit-ski competition was David Schroder, of Miami, Florida. Schroder had skied before his disabling accident, but the first time he went down a hill in the Winter Park program was fresh exhilaration. "I made a connection with my past and the hundreds of times I was on the slopes before—all the sensations. This experience is a continuation of the good experiences I had in the past."

Sweeping first-place victories in the three major events that she entered for paraplegic women (the downhill, giant slalom, and slalom) was Marilyn Hamilton. Hamilton is a wife, homemaker, a business woman with two jobs and she doesn't let anything get in the way of her goals. "Everyone needs a balance between work and play," she asserts, and feels strongly that it is vital that disabled people find fun things to do as soon as possible after becoming injured. "In my case, the ability level

was gone, and I started over again on the level of a one-year-old. That's a big gap. Mobility was such a problem that after I had regained my ability to move around, I started manufacturing wheelchairs to help provide the greatest mobility possible."

Chuck Lord was in the Marine Corps when an accident in an amphibious tractor caused a tree to fall on his back and fracture his skull. His motor disfunctioning has put many obstacles in his path at Winter Park, but he doesn't give up easily and now skis regularly. Lord's skis are braced with a toe-bar and a ski-bra that keep the skis in a snowplow position, while still allowing him to maneuver from side to side.

With a sparkle in his eyes, Lord explains that, "Skiing has helped me extend myself into other areas. Handicapped people can be talked into stopping if they don't succeed the first time. This is a mistake. They need encouragement from people who can show them how to make the most out of what they have."

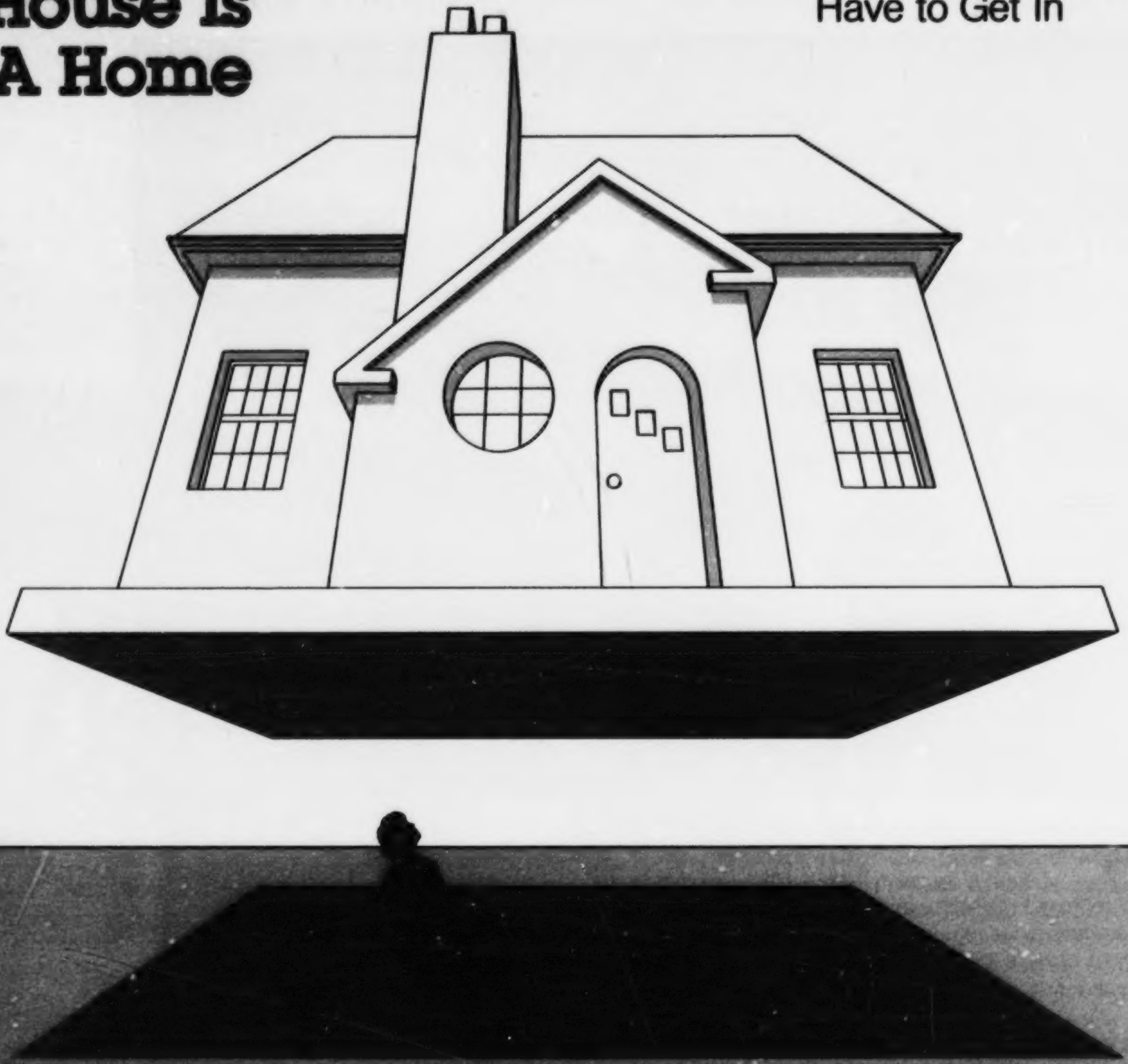
The participants in the Winter Park program agree. When you are making a downhill run at breakneck speeds, carving a turn in the slalom, or just cruising for fun, you are master of all you survey—it's all up to you. Any handicapped person who enjoys watching winter sports or, before becoming disabled, participated in winter sports has a soft yearning in the heart. That feeling is for the thrill of skiing. Although handicapped persons do not ski in exactly the same way as able-bodied persons, they discover new confidence that propels them to participate in other sports, social activities, and the business world.

—Bud Van Orden

Mr. Van Orden is a member of the State Relations division of the President's Committee.

An Accessible House Is A Home

Before You Can "Come Home," You Have to Get In



To rehabilitate: To restore to former capacity, rank or right; to put into good condition again.

For someone who becomes mobility impaired, rehabilitation involves being able to live independently and to support oneself. Time and hospitals help to repair a person's shattered self-image. Insurance or government benefits provide a buffer against being cast back into a world with which you are not yet ready to deal. But at some point most of us are ready; we learn to use what we have and do what we can. Rehabilitation sets in, sometimes in spite of ourselves.

So here we are, somewhat job and world-ready, ready to meet the first challenge. Usually we don't have to look far. It may be as close as the front door, if the door can't be closed while we sit in the new wheelchair. The standard home, which is supposed to be man's (or woman's) castle, can resemble a dungeon torture chamber when the person living there is disabled.

Being disabled often means additional time for everyday tasks, since things must be done differently and sometimes with adaptive equipment. If, on top of this, still *more* time is necessary because of inaccessible features in the home, a disabled person may well decide that going to work or school just isn't worth it. For example, after going through a contortionist's act to get her clothes from an inaccessible closet, one quadriplegic young woman comments, "Sometimes I'm worn out before I even leave the house."

A few modifications can mean the difference between being consistently on time to a job and frequently late; between needing a full-time attendant and part-time housekeeper; and between living with relatives and being on your own. Explains one disabled

A few modifications can mean the difference between being consistently on time and frequently late;

woman, "The more things that are arranged so that I can reach them myself, the less help I need from someone else, and the better I feel about myself." A boost for the finances as well as the self-esteem.

A newly disabled person often finds him or herself in the position of either finding an accessible place in which to live or modifying the current dwelling. Let's look at househunting, where good preparation insures a more favorable outcome. Before you even begin, make a list of features you need or want. Revise this list as you check out possibilities, and write down the positive features of each house you view for later comparison.

If you plan to rent, have a list of questions for the landlord. Asking how he or she feels about modifications in general or a particular one you have in mind is almost a must.

CHECKING OUT A DWELLING

Some important concerns for disabled househunters to keep in mind include:

Outside the residence—

- Find out what security arrangements exist and be comfortable with them before you move in.
- Look at nearby stores and bus stops, are they convenient?
- In the neighborhood, do steep hills and rough sidewalks and curb cuts transform a stroll into a mental and physical workout?
- Check to see if parking is off-street, in a lot, or in a garage. See if parking stalls are wide and close enough to the building entrance.
- Do walkways provide easy access from the parking area to the residence?

Entering the residence—

- Ideally, entrances to buildings and individual units should be flat, but one-half-inch thresholds are tolerable in most wheelchairs. The width of the door is critical, measure it carefully. Also consider whether or not a screen door would be useful and convenient.
- Ramping stairs depends on the open area before the stairs. Most people in manual wheelchairs can use a ramp that is 12 feet long for every foot it climbs. Since many steps are six inches high, to calculate how many feet you need to ramp a given set of steps, multiply the number of steps by six. Many people do get by with shorter ramps; it depends on need and ability.

Inside the residence—

- Test the interior space for easy maneuvering. (Actually, older homes and apartments are often more spacious than newer ones.) Walk-in closets are especially convenient for wheelchair users.
- Access standards recommend that hallways be 36 inches wide and doors 32 inches wide. If these are less in the residence you are viewing, make certain you can tolerate it.
- Bathrooms are frequently modified because they are so important but also so devoid of extra space. If you rent, find what permission you need to add grab bars or change the tub or sink. (Sinks without cabinets underneath are preferred by wheelchair users.)
- Much about kitchen access depends on which way the refrigerator door opens. (One disabled man moved an inconveniently opening refrigerator into his dining area; the open space in the kitchen became a shelving unit.) Don't expect that all kitchen cabinets and counters to be at the same height; a dishwasher is great, as long as it is next to the sink.

  A pull-out breadboard is a perfect all-purpose workspace for a wheelchair user.
- Carefully note the location and height of light switches, electrical outlets, and phone jacks. Figure out which ones you can use and which you cannot.

Individual needs—

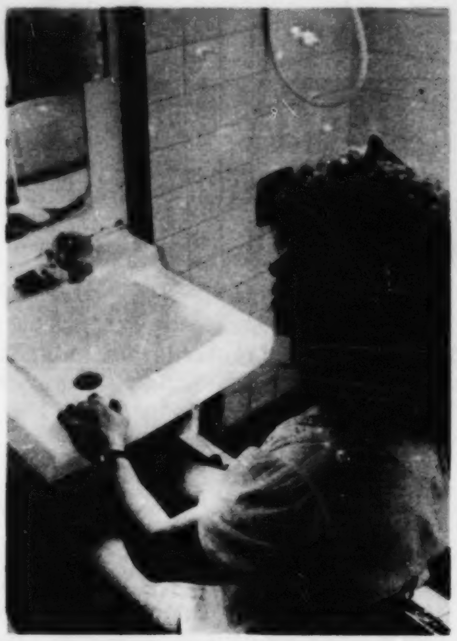
Each of us has his or her own requirements for a comfortable home, and these may differ from accessibility standards. An ambulatory disabled person, for example, may love a built-in breakfast nook which a wheelchair user finds totally useless.

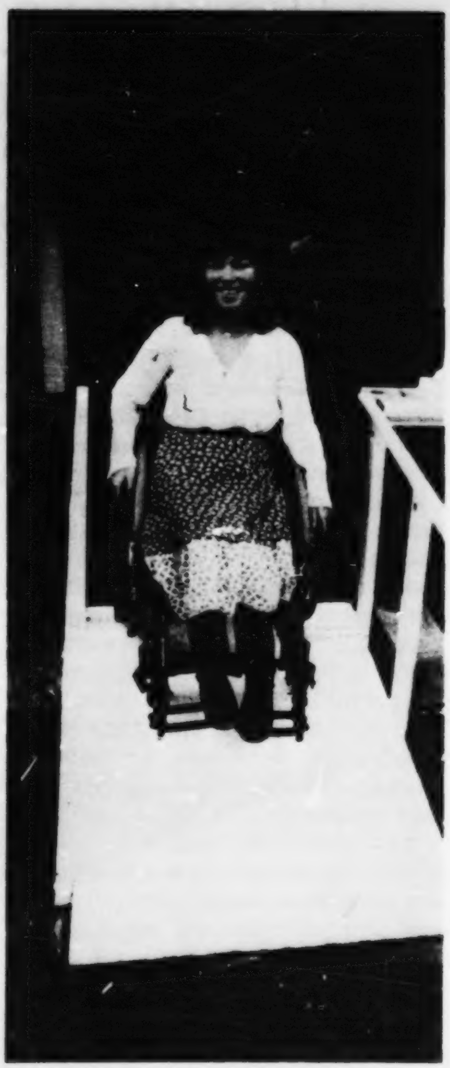
Some dwellings also have more to offer for leisure time pursuits. A disabled woman who can't get down to sit on the ground comments about her home and says, "One thing I really like is the stone planter boxes. I love gardening and working in the yard. My son does the yard work, but now I can sit down and do my own gardening."

MAKING CHANGES

If you do not plan to move to a new residence, or when you choose a place that more or less suits you, chances are you still encounter inconvenient features in your dwelling. You should start thinking about possible adaptations to the residence.

Just as with modifications to public buildings, modifications for home accessiblity can ordinarily be used by able-bodied as well as disabled people. Well-thought out modifications, furthermore, can add to the appearance, and sometimes even the value, of a home. In addition, some changes offer other practical advantages. For example, ramps over stairs not only accommodate wheelchairs and foot traffic, they provide easy access for bicycles and dollies bearing heavy furniture.





Having all existing housing designed to accomodate all disabled people is the ideal situation. Until such a dream becomes a reality, demons of inaccessibility will continue to haunt our house-hunting and housekeeping reveries. As much in life, the only thing on which we can depend with any consistency is ourselves. With a little thought and effort, we can make our living situation reasonably convenient and comfortable—an important part of the meaning of a true home.

Ramps— Ramps are fairly easy to build from plywood with beams underneath for reinforcement. Thirty-six inches is considered a good width. If the ramp is more than a few feet long, curbs are usually a good idea. One way to add curbs is to nail two-by-twos to the top of the ramp along the edges (this may require a wider ramp). If you desire handrails, wooden ones put on with bolts work quite well. Handrails need to be about 30-34 inches high.

Door pulls— Long pieces of rope, string or yarn tied to the doorknob make it easier to close the front door if you sit in a wheelchair.

Bathroom— Bathroom doorways, with the door on, are frequently too narrow for wheelchairs. The door can be easily removed at the hinges and replaced with a shower curtain or a pull-down window shade. Swing-clear hinges are also available. These hinges allow the door to open away from the frame, thus giving the same additional clearance as if the door were removed.

Sliding shower doors can be removed, too. An ambulatory friend with rheumatoid arthritis said, "About the only big modification I needed to make in my condominium was to remove the glass shower doors. Since I can't bend my leg, there wasn't enough room in the open doorway for me to get into the tub. We replaced the doors with an ordinary shower curtain and now it works fine."

Many different types of grab bars are available (in different colors, too!), so that a handhold can be put almost anywhere you need. However, grab bars must be attached to beams or other solid reinforcement. Shower chairs and hand-held shower extensions may also be useful. Mirror tiles can usually fit on the wall between medicine cabinet and sink, and provide easier viewing for someone in a wheelchair. Double toilet seats (flip down the low one only, or both) are practical when one household member needs the extra height and another prefers the regular height.

Kitchen— Making a kitchen truly accessible often involves major remodeling or major purchases, but it might be worth the expense. For example, the original sink and counters can be replaced with ones of a more suitable height and style. This can be done so that the former height can be restored with minimal effort—important to landlords or future buyers.

Setting a built-in style stove on the floor can subtract several inches from stovetop height. Plywood put on the sides for a finished look can double as a holder for utensils and potholders on hooks. Side-by-side refrigerators are often more convenient for people in wheelchairs or whenever reaching up or down is a problem.

Full accessibility is not always required, if a building is at least adaptable

One of the major complaints about building housing units that are completely accessible to disabled people is the understandable monetary concern that the unit wouldn't be rented or sold until a disabled person happend to want it. But housing can be designed to be *adaptable*, and guidelines have been proposed.

According to *Housing Adaptability Guidelines*, published by Peoples Housing, Inc., "An adaptable dwelling unit is one that is accessible from the start in terms of entry and circulation, and adaptable through minor renovations and additions for use by disabled people. Some of the items that are initially provided, such as the structural reinforcement in the bathroom walls for the eventual use of grab bars, make it easier and less expensive for this later conversion to an accessible unit."

Richard Hoagland, chair of the Architectual Barriers Committee of the California Association of the Physically Handicapped, states that, "Almost every new house or apartment can and should be minimally usable by persons in wheelchairs by requiring that all doors through which residents pass be a minimum of 32 inches in width and that an accessible path from an attached garage be provided into the interior of the ground floor of all dwellings."

If nearly all dwellings were minimally accessible to people using wheelchairs, many disabled people would not only have a wider choice of where to live, we could visit our able-bodied friends with considerably less hassle than we now have.

Less expensive adaptations for the kitchen include stools to sit on while working at the sink or counter, and wheeled carts for transfering dishes and food. Grab bars installed vertically between the doors of upper cabinets are very effective for someone who can stand with support. If there is extra wall space, a person can hang shelves, wooden boxes and other containers at appropriate heights for extra storage.

Closets— Often closets are hard to get into and the rods are too high. The rod can be lowered or a new one put in at a good height (using a dowel of the right length and ready-made dowel holders). Or, if there is an appropriate area elsewhere in the home, a dowel can be hung from the ceiling on heavy chains.

Bedroom— If a standard height bed is too low for easy access, a wooden platform can be built to raise it to a convenient level. For someone with sufficient arm strength, a trapeze-type rod installed from the ceiling might be good for both exercising and getting in and out of bed. Also available are remote control systems that allow an individual to electrically control some household functions from a central location, such as the bed.

Individual needs— Our hobbies and interests determine many of the adaptations we make. For example, a smooth-surfaced interior door (the bathroom door we removed?) placed over two filing cabinets (the two-drawer kind) makes an ideal worktable for someone in a wheelchair. There is plenty of maneuvering room between the file cabinets, and the height is right. (In addition, someone else can easily use the table by pulling up a chair.) I use my worktable to hold a typewriter, a turntable and a sewing machine.

Every disabled person is different from every other disabled person; only the individual can determine what he or she needs and wants. Independence means having control over our own lives, regardless of the number of modifications we need to make. Where there's a will, there's independence. And independence begins at home.

—Marti Hacker

Ms. Hacker is a free-lance writer.

RESPONDING

WINTER 1981

TV Captioning

The solution to the "open" versus "closed captioning" (controversy): A switch on the TV set to turn the captioning on and off. It then becomes the viewer's choice to have captioning. This would require that closed captioning be used and that every TV set have a decoder. However, if every program and commercial were required to be captioned and if every TV set had a decoder, the cost per unit would come down. If a percentage of the cost of each new TV set or cable hookup were turned over to the National Captioning Institute, the system would be paid for by the 75 million households that own TV sets.

(Besides hearing impaired persons) others want to watch in silence. Some do not want to disturb a sleeping family member; others need to "see" what they hear for reinforcement. Still others with minimal language skills would better understand the basic language used in captioning. The captioned TV program is not the oddity it used to be.

Bruce H. Scott
Kansas City, MO

In response to Mr. Scott, I say, "Right on!" What he proposes is precisely what CBS's teletext does. Current estimates are that teletext decoders will become available in late 1982; that all new TV sets will come with teletext as standard equipment by 1985; and that all TV homes will have teletext by 1991. Captioning will be available not only to hearing impaired viewers but to everyone.

What's (one) difference between CBS's teletext and the Line 21 system (advocated by the National Captioning Institute)? Line 21 serves hearing impaired viewers only. The number of hearing impaired people is small in big business terms. Only one company produces the telecaption decoder, which sells for slightly under $300. Since the decoders first appeared 2 ½ years ago, the price has increased 16 percent. Nothing indicates any significant reduction of this cost in the future.

Teletext decoders are intended for hearing as well as hearing impaired audiences. (Because of) a mass market and competitive pricing, teletext decoders will be produced by several major manufacturers, (including) RCA, Sony, Zenith, and Magnavox. The cost of teletext devices will decrease rapidly as their market increases, like handheld calculators which originally sold for hundreds of dollars, but can now be purchased for as little as $10 or $15.

Daniel B. Glisson, Jr., Manager
The Caption Center/Los Angeles
Los Angeles, CA

Annette Posell, Manager
Marketing and Public Relations
WGBH Caption Center
Boston, MA

SPRING 1982

IYDP: Con and Pro

I have to wonder if the International Year of Disabled Persons was the resounding success that some of us are told. People still park in slots reserved for the handicapped. Condescending managers, having convinced themselves that they did their part, will sometimes not bother to repaint the wheelchair logo after the paint has been obliterated.

No remarkable change has been seen with regard to accessibility in public buildings other that those on the drawing boards. Damn little mention has been made of people with "hidden handicaps." The only activity of note with regard to employment has been the massive layoffs. Agencies (that help handicapped people) have the opportunity to help those individuals all over again.

We did get a postage stamp. We heard a lot of speeches embracing our just cause. Perhaps I'm too cynical, but I've seen these projects come and go and have the same resounding effectiveness as the "trickle down" theory.

Phillip C. Smith
Parkersburg, WV

It was nice to hear what other communities and states did to celebrate the IYDP. I believe that 1981 was a pretty good year on the whole for the disabled. It brought needs more out into the open.

That disabled people can and do lead fulfilling lives is another positive thing that came out of the IYDP. Sadly, agencies (that serve handicapped people) will have to fight all over again for the handicapped, due to the Reagan Administration's cutbacks in education, employment, housing, transportation and other programs. I above all believe that the IYDP brought dignity to the disabled population. It taught the general public that a disabled person ought to be treated like any other human being.

Leslie Higgs
Pittsburg, PA

Comments on the Keller Story

"A Brilliance Somewhat Misunderstood" was well-written and interesting, a fascinating approach. However, I was surprised and disappointed (about no) reference to Dr. Robert J. Smithdas, presently director of community education at the Helen Keller National Center.

Deaf-blind since the age of four and a half, a published poet, author and lecturer, Dr. Smithdas is a man who personally knew Helen Keller. Perhaps the writer was unaware of this valuable resource?

Barbara Housman
Helen Keller National Center
Sands Point, NY

Editor's note: The writer did not interview Dr. Smithdas because the purpose of the article was to present the thoughts of deaf-blind persons who had only heard about Keller.

New Address for a New Logo

I was pleased to see my sign language logo in "Disabled USA." However, the address printed was my business address at that time. I now have a new position with another company and the address is 112 East 19th St., New York, NY 10003 for requesting more information about using the logo.

Ann Silver
New York, NY

Veterans Rebuke Busing Story

Kay Neil's article, "The Busing Controversy," does not represent the views of most handicapped persons. Although it is true that many PVA members drive their own vehicles, what Neil fails to recognize is that handicapped persons want the same choice in determining their lifestyles that able-bodied persons have.

Federal policy towards improving mass transit for *all* persons stemmed from the realization that the existence of efficient and cost effective transit was crucial in large urban areas. The availability of public mass transit also ensured that the transportation disadvantaged, (poor, elderly, and handicapped persons) could avail themselves of employment, educational, and cultural opportunities within their communities.

In 1970 Congress increased the federal government's financial commitment to urban mass transit and assured a high national priority for "all citizens" to move about quickly and at a reasonable cost. Nothing in legislative history supports the interpretation that "special efforts" is designed to mean "separate, alternative, or comparable" service. This notion was specifically rejected by the author of the 1970 legislation, Congressman Mario Biaggi (D-NY).

Specialized services alone cannot meet the needs of disabled persons. Moreover, registration, advance reservation, trip priority, and notice of trip purpose are requirements that able-bodied citizens would never tolerate.

PVA strongly opposes Neil's inference that practicality must prevail over civil rights. In "Brown vs. Board of Education" the Supreme Court determined more than 25 years ago that "separate" is "inherently unequal." Although this was an education case, the decision later overturned a court ruling which permitted separate (transportation) facilities for black persons.

As a public member of the Architectural and Transportation Barriers Board, Neil's voting record has been challenged as being inconsistent with other disabled members. Her position in her article is an affront to the dignity and spirit of all handicapped Americans.

R. Jack Powell, Executive Director
Paralyzed Veterans of America
Washington, DC

Making It Clearer

Two remarks about my article, "DD Radical." I noticed a typographical error at the beginning of the second paragraph. As printed, the first sentence reads "Remember that life is often as painful as being there." The first word should have been "Remembering." Also, Concerned Youth for Cerebral Palsy was the department within United Cerebral Palsy Associations which spearheaded many of the self-advocacy initiatives of the organization. The connection between Concerned Youth and the Associations may have become a bit unclear in the revised article.

Rita A. Varela
Zephyrhills, FL

Kind Remarks

Post-polio syndrome is a scary business and it is good to have your thoughtful summary of the situation. Every now and then I see a copy of "Disabled USA" and I am impressed by its intellectual growth and development. It has real substance and vigor.

Hugh Gallagher
Cabin John, MD

Advice for A Better Layout

Enhance "Disable USA" for the visually impaired by using black ink for your text. Blue and red inks are exceptionally difficult for the partially sighted. Use larger print, especially since your publication has a very high percentage of wasted space (the Spring 1982 issue equals about seven pages). You could also scale down the oversized pictures and drawings.

Please don't feel alone! For many years, I have seen too many highly educated social service workers, counselors, and even Lions Clubs continue to be negligent and downright stupid concerning their duties and services for the handicapped.

Dean Flewwellin
Aberdeen, SD

The [illegible]'s [illegible]

A CHANCE FOR TRAINING . . . Federal legislation signed by President Reagan on October 13, and called the Job Training Partnership Act, includes important provisions for handicapped persons. First, training programs funded by the Act can set aside up to 10 percent of their training slots for persons who are not poor but have problems securing employment—this includes many handicapped persons.

Second, private industry councils must include rehabilitation professionals as participants; and several national programs and pilot projects will include training for handicapped persons.

Finally, to qualify for training slots for which there is an income criteria, if a handicapped person lives with family, only the individual's—*not the family's*—income will determine eligibility. This marks one of the few times that disabled persons seeking income-tested public services have not been penalized for residing with family.

HIGH TECHNOLOGY . . . Computer Aids, Inc., has combined a speech synthesizer, an Apple II computer, and several new computer programs and created a talking computer with many applications. Visually impaired persons can use the device as a programmable computer, a calculator, a terminal, a filing system, and a word processor. The speech synthesizer has different pitches and speeds, and it can read individual letters, numbers, and punctuation marks. Questions about the equipment and its applications should be directed to Bill Grimm, Computer Aids, Inc., P.O. Box 5502, Fort Wayne, IN 46895. (219) 424-4042.

LOW TECHNOLOGY . . . Evacuating wheelchair users down stairwells in high rise buildings can be facilitated with an "Evac Chair." The device (which can be folded and stored on a wall) has a folding seat, two front wheels, and two back runners. The back runners have heavy friction belts that slow the descent of the Evac Chair as it smoothly slides down stairs. Only one able-bodied person is required to hold onto the Evac Chair and guide its descent. The manufacturer of the Evac Chair is Egen Polymatic Corp., 17 East 67th Street, P.O. Box 522, New York, NY 10021. (212) 734-6222.

GETTING JOBS . . . In a 75-page booklet, "Employment Service Concepts," five affiliates of United Cerebral Palsy Associations and two noncommercial enterprises detail employment programs they offer to disabled persons. Programs include one in which workers produce and distribute food and another that evaluates and trains workers and also assists them to live independently.

Two programs outline how consumer organizations can serve commercial employers who wish to employ handicapped persons. Finally, the booklet presents a one-year diary of a placement program director who worked with disabled people trying out competitive employment. "Employment Service Concepts" costs $2.25 and may be ordered from Professional Services Program Department, United Cerebral Palsy Associations, 66 East 34th Street, New York, NY 10016.

. . . "How to Get the Job You Really Want" offers step-by-step instructions for deaf and hearing impaired people who are preparing to enter the job market, who seek promotions, or who want to change careers. Organized as a workbook, the publication allows readers (through a variety of activities) to learn about job search decisions, resumes, employment letters, sources of employment information, interviewing, and starting on a new job. The publication is available from National Association of the Deaf Bookstore, 814 Thayer Avenue, Silver Spring, MD 20910, and costs $10.95 plus $2.50 for shipping. Bookstores, schools, and organizations ordering more than five copies will receive a 20 percent discount.

. . . The President's Committee has launched a series of "Employer Guides" by publishing two six-page brochures, "Simple Steps to Job Accommodation" and "How to Successfully Supervise Employees with Disabilities." Both brochures provide tips and advice on how employers can accommodate disabled persons in the work place and help to insure successful job performance. Order copies from the President's Committee on Employment of the Handicapped, Washington, DC 20210.

PRINT HANDICAPPED READER . . . Currently, the Library of Congress records *selections* from "Disabled USA" and other disability publications onto a single cassette which is available under the name "Encore." Please let the editor of "Disabled USA" know if you would like to receive *the entire* magazine in a recorded form and whether you would strongly prefer either cassette or disk. If interest is high, the President's Committee will seek to have the Library of Congress make all of "Disabled USA" available to print handicapped readers.

THOROUGHLY INDEPENDENT . . . The President's Committee has issued a new 60-page bibliography, "Rehabilitation for Independent Living," to replace the one published in 1980. Materials cited in the bibliography (books, pamphlets, films, and periodicals) come from over one hundred information sources. Many aspects of independent living receive separate treatment in the bibliography. Among them are home management, sexuality, transportation, and community living. Single copies are available from the President's Committee on Employment of the Handicapped. Order bulk quantities from the Superintendent of Documents, Government Printing Office, Washington, D.C. 20402.

FROM THE GRASS ROOTS . . . Jack Leighton Rugh, who has been involved in local Committees on Employment of the Handicapped in California for the past third of a century, has written his recollections of the past and his proposals for the future in an engaging book, "Jobs for the Handicapped." He believes the only way progress will come is through the organization of strong local committees of volunteers, representing a broad cross-section of society. Staffing, he says, can come from local public employment offices or local vocational rehabilitation offices. Copies of the book are available for $11 from Rugh at 5555 North Charlotte Avenue, San Gabriel, CA 91776.

Harold Russell

THE PRESIDENT'S COMMITTEE
ON EMPLOYMENT OF
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